FATE OF 395 MILD NEUROPSYCHIATRIC CASES SALVAGED FROM TRAINING PERIOD AND TAKEN INTO COMBAT[1]

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The author believes that it would be a contribution to psychiatry and to the armed forces to discuss the fate of 395 mild neuropsychiatric cases who were salvaged from the precombat training period of an infantry division and later taken into combat.

A strange, unpredictable psychiatry is combat psychiatry. True, basic personality defects and reactions may be the same as seen in civilian psychiatry(1), yet there are many differences in the initial reaction types in degree(2), symptomatology(2), and causative dynamic mechanisms(3, 4).

DEFINITION AND CAUSES

Prados has aptly stated in his monograph(2):

> Fright neurosis is the pure expression of a "situation" neurosis. It is a psychopathological reaction to the experience of a profound catastrophy. Other factors, like physical exhaustion, hunger, thirst, lack of sleep are important contributing factors in the development of this condition. The patient is disorientated particularly as to time and place; in severe cases either deep stupor or wild delirious and confusional states with hallucinations and great agitation are observed. Sleep is poor and often disturbed by terrifying nightmares which reproduce the original frightful experience. In mild cases lack of attention and of memory, fixation and marked fatigue are observed. Palpitation, tachycardia and other symptoms of vasomotor lability are always present. The onset is very acute. Recovery is almost certain after a few days or weeks of rest, deep sleep and sedation. Active psychotherapy hastens the recovery and may prevent the recurrence of the disorder. Amnesia of the early acute stage is practically always present.
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> In anxiety neuroses, on the other hand, the picture is quite different. Anxiety states are "character" neuroses. The acute phase or attacks of anxiety represent acute episodes of a long-standing condition. The origins are usually found early in life. Emotional maladjustments and difficulties in the early interpersonal relationships force the individual to build up certain neurotic trends to cope with the difficulties of living. Anxiety feeling dominates the whole personality. Unlike fear or fright, anxiety is not a reaction against objective threatening of actual danger. The neurotic person protects himself against his anxiety by turning it into fear by means of "projection" and rationalization. He may feel more concerned about his own body, fear of being sick (hypochondriasis) or of losing his mind. He may also project his fear on other people, as does the over-solicitous mother who is constantly afraid of the dangers which threaten her children.
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> The symptomatology of the anxiety state is also very different from the fright neurosis. In the former there is no loss of consciousness, no stupor or excitement or delirious states. The anxiety states are chronic, and only long-term psychotherapy can help the patient.

Pertinent to this point, Cruvant(3) states:

> The neuroses of war occurring in combat and during military training present an orthodox paradox. While in one sense they are not different from neuroses occurring in civilian life, they are in another sense a distinctly different disease. External factors play a far greater rôle than the internal conflicts which are usually the basis of the ordinary neurosis.

As I recall, it was Wm. C. Menninger, neuropsychiatric consultant to the Surgeon General of the Army during World War II, who said, "In combat psychiatry we deal mostly with normal individuals in an abnormal situation (battle); while in civilian psychiatry it is the reverse." Some may suggest that the machine age, dangers from automobiles, trains, and airplanes; sexual and marital maladjustments incident to urbanization; the forced separation of man and wife and family due to war; the industrialization of our country—that all these are just as stressful as modern combat dangers. The author is not inclined to concur in the latter opinion.

Several psychiatrists, many of them(3-11) of national or international reputation, have written quite knowingly or spoken freely about war neurosis, combat exhaus-

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tion, operational fatigue, shell shock, etc. Many of these same psychiatrists never had to distinguish between "in-coming and outgoing" shells, never saw the combat psychiatric casualties at the time or in the situation of origin, and never had to endure the hardships with front-line troops for several months. With no discredit to these leaders in psychiatry, the author feels very strongly that one has to live with troops in or near the front lines to be able to appreciate what combat psychiatry really is. It is unfortunate, though perhaps understandable, that more has been written about combat psychiatry and war neuroses by those never having experienced combat(3-8, 10, 11) than by the combat psychiatrists themselves(12-15).

The author entered the army, May 20, 1942, and was assigned as a psychiatrist and ward officer at Darnall General Hospital, Danville, Ky. During his 18 months' assignment there, he had the opportunity of seeing many of the major psychotics who broke down shortly after induction or in their early training period. Also, many psychotics returned from combat overseas were seen, and their causes of failure evaluated.

The author was then assigned in November 1943 as division psychiatrist with the 99th Infantry Division and served for the next 11 months in the division's precombat training phase, following which he went overseas with the division.

Psychiatry of the Precombat Training Phase

The experience of "polishing up" an infantry division, psychiatrically speaking, during the training period for combat, proved to be one of the toughest jobs, yet one of the most challenging and interesting assignments, the author has ever had. Over 1,300 neuropsychiatric examinations were performed (which represented about 10% of the division strength) during the 11-month period. The task of determining who was tough enough mentally to stand combat and who was not, after seeing the men perform on maneuvers, report on sick call, etc., was really a difficult one. This was especially difficult when remarks were hurled at psychiatrists from all sides: that the men with NP disabilities were sick-call artists and why not get rid of them by C. D. D. (civilian disability discharge); or that they were basically cowards and that their actions might panic the whole company, according to company commanders. On the other hand, various officers in the division and regimental headquarters wanted to make these unstable men all fight since, in their opinion, they were almost all just malingerers trying to evade hazardous duty.

Nevertheless, after all the hard work reassigning within the division and transferring some out of the division, we thought ours was one of the tougher outfits in the army. Yet, how we took the 395 mild NPs with us into combat, with fear and trepidation as to what they would do when the first few shells came in, will remain an epic with us, those of the division surgeon's section, at least.

We said in the division surgeon's section, "We think they can be utilized in combat." The battalion and regimental surgeons said, "You'll see. They'll break down after the first few shells burst."

At the 3-day orientation meeting given for division psychiatrists in Washington, D. C., in December 1943, the I. G. department representative and G-I said, "You can and must use some of these mildly unstable men." Some of the high ranking officers in these departments had this opinion, partly because we had "scraped the bottom of the barrel" of manpower and partly because I. G., G-I and other department heads always feared that the escapes from hazardous duty via diagnosis of psychoneurosis and/or psychopathic personality might become contagious.

Of course, statistical figures of the overall picture in the army at that time gave considerable justification for this anxiety(18). There was, and still is, considerable evidence to show that it was the nonpsychiatric medical officers who were responsible for medical discharges of many mild psychoneurotics, or reassignment to noncombat duty of many more.

For example, William C. Menninger states(19): "At first only 5 to 10% of NP cases were salvaged for return to front-line duty in combat divisions. But after trained division psychiatrists were assigned and ex-

haustion centers established, near the front lines, 60% were salvaged for combat or service in the forward area, after 2 to 5 days treatment."

Salvage Rate for Return to Front-Line Duty

Actually, the salvage rate for return to full front-line duty was more lopsided in some instances than stated by Menninger (19). The author had the opportunity of first serving in the 99th Infantry Division during 6½ months of combat and then 4 months in occupation duty with the 1st U. S. Infantry Division. He made a careful survey of return to front-line duty statistics and found that 44.2% were thus returned and utilized in the 99th (see Table III in reference 14) whereas only 2.1% were salvaged to return to duty in the front lines in the 1st Infantry Division during the same period (last 6 months of the war in Europe), and under comparable conditions of battle stress (viz., battles of the Ardennes, Cologne Plain, Remagen Bridgehead, Ruhr Pocket, etc.).

In addition, there were twice the number of NP casualties in the same 6½-month period in the 1st Infantry Division as in the 99th. Yet both divisions were subjected to comparable degrees of heavy combat actions.

The division psychiatrist with the 1st Infantry Division at that time, as well as for the whole period from November 1943 (when division psychiatrists were assigned) until V. E. day, had been a former gynecologist. He had received the 10 weeks orientation course in psychiatry given in England about that time and had been assigned to do the job. He frankly admitted he was not a psychiatrist, nor was his primary interest there but instead in the field of gynecology in which he had been adequately trained. He was a fine man and an excellent doctor in his specialty, but lacked training as a psychiatrist.

It is believed by the author that, in the event of a future emergency, adequately trained psychiatrists should be assigned to the combat infantry and armored divisions from the very beginning of their training period. The author feels strongly that trained psychiatrists can and will do more toward treating and salvaging NP cases, than will hastily converted models of psychiatrists, transferred from other fields of medicine.

Lessons From Combat Psychiatry

In the event of another emergency, it is of extreme interest to combat psychiatrists and to the armed forces to note well the lessons learned from combat psychiatry in World War II. Outstanding among these lessons is that the mere fact that a soldier has a few neurotic trends or a mild family history predisposition does not necessarily mean that he will early or even ever become a neuropsychiatric casualty. For example, Plesset(12), a division neuropsychiatrist, took overseas and into combat in his division 138 men who had presented adjustment difficulty during training sufficient to necessitate psychiatric attention:

> Most were chronic complainers who were referred by unit surgeons. They represented an assortment of neuroses and so-called constitutional psychopathic states. None of these cases had received any intensive treatment, although all had received superficial therapy—usually in one interview and an attempt had been made at proper assignment. At the end of thirty days of combat only one of the group had been evacuated for combat exhaustion (army terminology in medical units forward of evacuation hospitals for psychoneurosis or psychogenic disorders).

Plesset further aptly adds,

> We know too little of the psychologic motives which keep men in battle. Much has been said of mechanisms of escape—too little about the techniques of "sticking it out." Such techniques as stimulation of patriotism, of sense of duty and pride in unit (and other group feelings) are used with benefit in the army. That many psychoneurotics can serve usefully within the U. S. is common knowledge. But in general their induction is discouraged by mobilization regulations, and their assignment is viewed with alarm. It is possible that there has been too much emphasis on finding and diagnosing psychoneurosis. How many of the rejected thousands could have adjusted to the service (including combat), no one will ever know.

The Fate of the 395

The writer had an experience somewhat similar to that of Plesset. A total of 395 mild neuropsychiatric cases (varied assortment of anxiety neuroses, other neuroses, and mild psychopaths) were salvaged from

the precombat training period of about 2 years and were taken into combat. A total of 9 cases were lost as neuropsychiatric casualties out of the original 395 salvaged mild psychiatric disorders, during the first 50 days of combat, which included the Ardennes Bulge Battle (16 Dec. '44 to 1 Jan. '45). Only 3 of these 9 cases had to be evacuated during this battle itself; the other 6, in the 35 days previous to the battle.

Our division (99th Infantry Division) was on the north shoulder of Ardennes Offensive Action (Bulge Battle) next to the ill-fated 106th Infantry Division, which latter unit was almost completely overrun by the German 6th Panzer Army and elements of the 5th Panzer Army. Fig. 1, "Penetration," shows the position of the 99th Division by the 2d Division on the north shoulder of the Bulge Battle during the first 24-48 hours. Fig. 2, "The Crisis," shows the relative position of these elements of V Corps and First Army during the next 12-14 days of the battle, clearly showing the battle stress under which the 99th Division fought.

The division received a commendation from Major General Huebner, V Corps Commander. The commendation stated in part:

> Early in the morning of the 16th of December 1944 the German Sixth Panzer Army launched its now historic counter-offensive which struck your command in the direction of Losheim and Honsfelt. This armored spearhead cut across the rear of your division zone with full momentum. During the next several days, notwithstanding extremely heavy losses in men and equipment, the 99th Infantry Division succeeded in establishing a line east of Elsenborn. Despite numerous hostile attempts to break through its lines, the 99th Infantry Division continued to hold this position until it was again able to pass to the offensive.
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> The 99th Infantry Division received its first baptism of fire in the most bitterly contested battle that has been fought since the current campaign on the European continent began.

But some would say that the reason why so few (9) of our 395 marked men actually were evacuated through the clearing station (point of medical evacuation of a division to rear hospitals) was that probably many of the 395 slipped out under other diagnoses which could possibly be faked, such as trenchfoot. However, our file of the 395 potential NP cases was checked against the A&D sheet of the clearing station for 1 December 1944 to 1 January 1945 (Table 1).

From Table 1 it can be seen that the following conclusions are in order:

1. Only 10 former NP cases of the 395 potential NP casualty group were evacuated as trenchfoot. This is no more than would be expected during the rigorous conditions of a winter campaign. (There were actually over 500 cases of trenchfoot for the division of approximately 13,500 men. With the proportion X: 395:: 500: 13,500, approximately 13 cases of trenchfoot would be expected in the potential NP casualty group of 395. Actually, only 10 resulted.)

2. A total of 35 former NP cases salvaged from precombat training period appeared on the records for December 1944, as requiring evacuation for conditions other than neuropsychiatric.

3. Actually, 14 former NP cases (of the 395 potential NP casualty group) served during the 50-day period, 12 Nov. '44 to 1 Jan. '45 until they had to be evacuated because of the various wounds as shown.

4. Hence the group of 395 potential NP casualties did very well in the first 50 days of combat losing only 9 due to the same NP condition as diagnosed in precombat training and only 35 for conditions other than neuropsychiatric. (Battle wounds, 14; trenchfoot, 10; etc.) Therefore a total of 44 were lost by evacuation from the original 395.

5. Thus, 351 mild neuroses and psychopaths or potential NP casualties remained on duty, for the first 50 days of combat, as effectives.

The author found(14) that the *lack* of neurotic predisposition to failure or breakdown in combat is just as common in the combat NP casualties (of whom 52.7% broke down without any demonstrable predisposition to failure) as is the presence of this hitherto-considered prerequisite to "combat exhaustion." The severity of the stress, and the situation in battle, are far greater factors in the etiology of combat exhaustion than is predisposition to failure in combat because of neurotic or personality trends(14, Tables I and II.)

Another proposition advanced by the author(14) that is important to mention at this time is this: Probably the psychiatrist in

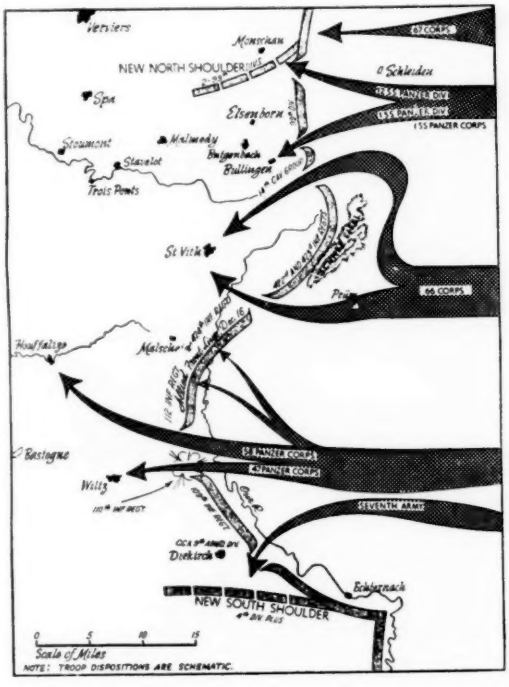

FIG 1.—The penetration.

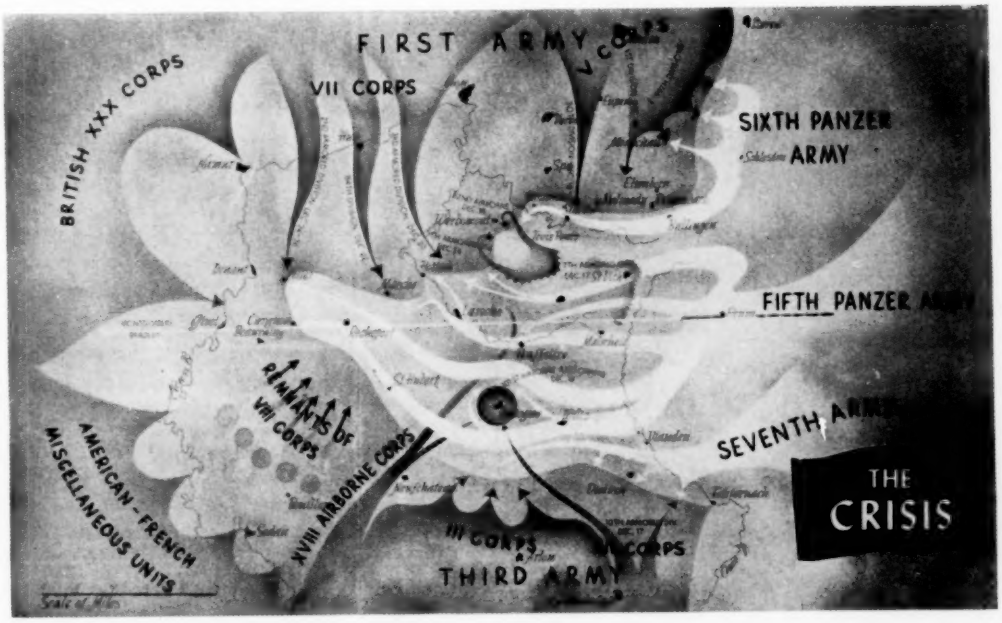

FIG. 2.

wartime holds his most important position in the role of a preventive and "salvage" psychiatrist in the divisions of front-line troops. However, only 5% of the total psychiatrists in the armed forces were allocated for this work. It is believed by the writer that even better work could be done in the psychiatry of combat exhaustion in the infantry divisions, if at least 3 psychiatrists were assigned per division. One could do the most good working in liaison with all the battalion aid stations. Another would probably function best in the present assigned position at the clearing station to "weed out" the most severe cases who failed to respond to 48 hours rest, sedation, and

TABLE 1

FORMER NP CASES APPEARING ON A & D SHEET AS ANY TYPE OF CASUALTY REQUIRING EVACUATION. (99TH INFANTRY DIVISION)

Period: 1 December to 18 December 1944 Inclusive

Patient	Former diagnosis in training period	Diagnosis for which evacuated
1.	Constitutional psychopathic state, mild	Frostbite
2.	Mental deficiency	Contusion, right ankle
3.	Psychoneurosis, anxiety state, mild	Wound abdomen, shrapnel
4.	Cardiac neurosis	Battle casualty, wounded in action, left shoulder wound, thorax
5.	Neurosis, traumatic	Trenchfoot
6.	Psychoneurosis, anxiety state, mild	Battle casualty, wounded in action, penetrating wound, right thigh
7.	Simple adult personality maladjustment with psychosomatic symptoms regarding stomach.	Frostbite
8.	Psychoneurosis, anxiety state, mild	Ulcer, gastric, chronic
9.	Psychoneurosis, anxiety state, mild	Battle casualty, wounded in action, penetrating wound, right arm and shoulder
10.	Headache, emotional and fatigue	Battle casualty, wounded in action, left shoulder
11.	Psychoneurosis, anxiety state, mild	Trenchfoot
12.	Psychoneurosis, conversion hysteria, mild	Cellulitis, left great toe, ingrown nail
13.	Adult personality maladjustment, mild	Battle casualty, shrapnel wound, right chest and spine
14.	Psychoneurosis, mixed, mild	Dermatitis, feet, bilateral
15.	Neurosis, gastric	Duodenal ulcer
16.	Psychoneurosis, anxiety state	Not yet diagnosed
17.	Mental deficient	Battle casualty, wounded in action, penetrating wound, left cheek
18.	Psychoneurosis, anxiety state	Pulpitis
19.	Adult personality maladjustment	Trenchfoot
20.	Psychoneurosis, anxiety state, mild	Battle casualty, wounded in action, bomb blast
21.	Psychoneurosis, postmeningitic	Penetrating wound, subscapular area, battle casualty, wounded in action
22.	Neurosis	Penetrating wound, left thigh
23.	Neurosis, cardiac	Battle casualty, wounded in action, penetrating wound, face and legs.
24.	Psychoneurosis, conversion hysteria, mild	Self-inflicted wound, gun shot wound, right hand
25.	Illiteracy and mental deficiency	Trenchfoot
26.	Adult personality maladjustment	Battle casualty, wounded in action, left chest and buttock
27.	Psychoneurosis, anxiety state, mild	Battle casualty, wounded in action, penetrating wound, head
28.	Adult personality maladjustment	Trenchfoot
29.	Adult personality maladjustment with low back pain	Trenchfoot
30.	Psychoneurosis, conversion hysteria, mild	Trenchfoot
31.	Psychoneurosis, anxiety state, mild	Trenchfoot
32.	Neurosis, traumatic, and borderline mentality	Trenchfoot
33.	Neurosis, gastric	Trenchfoot
34.	Psychoneurosis, anxiety state, mild	Battle casualty, wounded in action, left leg, shrapnel
35.	Psychoneurosis, anxiety state, mild	Not yet diagnosed

psychotherapy. A third is needed to treat the mild "salvageable" cases at the reserve platoon of the clearing station (when the division is mobile in a rapid advance) or to treat the more severe cases by pentothal narcosynthesis or more prolonged psychotherapy. This third psychiatrist could also aid a line officer in his work rehabilitating "salvageable" cases with more training in familiarization with weapons, patrolling drilling, etc. This should instill more confidence in the soldier when he returned to the front lines.

Credit Where Credit is Due

In the foregoing discussion the writer does not wish in any way to discredit the leaders in the Psychiatric Consultants Division of the Surgeon General. Brigadier General William C. Menninger and his assistants did a fine job. And we who worked as division psychiatrists overseas in combat units appreciated very keenly and gratefully the many helpful thoughts, suggestions, and the directives that were passed down to us from our leaders in the higher departments. True, we knew that not all the suggestions or directives handed down could be perfectly applicable to every situation in combat.

Great credit should be given to Col. Berison of Guadalcanal fame and Lt. Col. Hanson, one of the earliest division neuropsychiatrists in the European campaign. Gen. Snyder, Inspector General's Office; Lt. Col. Seidenfeld, of Personnel Classification and Assignment; Major Everts, Neurologist; Col. Porter; Capt. Appel, and others also aided greatly in the proper orientation of newly appointed division psychiatrists at the Washington meeting 13 December 1943. To Lt. Col. Hanson and possibly a few others of the earlier combat psychiatrists should be given credit for the full understanding of the so-called "Combat Saturated" type of combat exhaustion, which occurred after 180 days of combat, if not sooner.

Summary and Conclusions

1. Mild psychoneurotics (if they are dispersed among stable personalities) and mild psychopathic personalities (if they can direct their aggression mostly toward the enemy instead of toward their comrades), can be utilized with combat troops.

2. Only 9 cases of an original group of 395 mild neuropsychiatric problems, taken overseas and into combat by the 99th Infantry Division, had to be evacuated subsequently as NP casualties during the first 50 days of combat. The latter 15 days of this combat period included such stress as the Battle of the Ardennes (Battle of the Bulge).

3. A total of 35 former NP problems salvaged from the precombat training period appeared on the A&D (Admission & Disposition) sheet for December 1944, as requiring evacuation for conditions other than neuropsychiatric.

4. Hence, the group of 395 potential NP casualties did very well in the first 50 days of combat, losing only 9 due to the same NP condition as diagnosed in precombat training and only 35 for conditions other than neuropsychiatric (battle wounds 14; trenchfoot 10, etc.). Therefore a total of 44 of these men were lost by evacuation from the original 395.

5. Thus, 351 mild psychoneurotic and psychopaths (who had been considered potential NP combat casualties) remained on duty for the first 50 days of combat as effectives.

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RESEARCH IN MILITARY NEUROPSYCHIATRY, SEPTEMBER 1945 TO SEPTEMBER 1947 [1]

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This paper is a result of a study made by the subcommittee on research of the Committee on Military Psychiatry of The American Psychiatric Association. The committee reviewed over 200 papers in the general field of military psychiatry published since the war (September 1945 to September 1947). Contained in its report are the letters and outlines of research for the same period, received from over 60 universities, institutions, agencies, and committees.

Our objectives were, first, to determine the progress and trends in military psychiatry since the termination of World War II. Secondly, to study the work being done at the present time and to point up the neglected areas of research. Finally, we hoped to discover how such deficiencies might be corrected and to help in over-all planning and coordination of research activities through the subcommittee.

We observed from the review of literature that the numbers of papers written by psychiatrists fell off sharply after the war, but the number of papers written by psychologists was sustained. Most of the work consisted of observations of individuals and their impressions rather than organized studies. There was a fairly general agreement on the importance and proved value of certain organizational developments in the neuropsychiatric field that emerged from war experiences. Two of these were the establishment of a Neuropsychiatric Division in the Surgeon General's office, and the appointment and delegation of responsibility to divisional neuropsychiatrists. The importance of preventive psychiatric techniques and the establishment of mental hygiene clinics was also recognized. Caldwell(1) states that mental hygiene clinics have become permanent fixtures in army organization. The convalescent centers, with emphasis on nonhospital group care and treatment, were enthusiastically received at first, but Sarlin and Berezin(2) in their detailed account of modified psychoanalytical group psychotherapy pointed out both the promise and limitations of this method in a military setting. Abraham and McCorkle's(3) success at Fort Knox Rehabilitation Center warrants further study with respect to the application of their methods on a larger scale. There was nothing in the literature that indicated how and in what way training facilities are being used to establish adequate standard training programs for group therapists.

On the nonorganizational level, the development of abreactive and other foreshortened methods of treatment were generally approved. However, aside from an occasional publication, there are no other findings of importance. Here we see a lack of progress in application of new treatment methods. The importance of psychological testing methods and liaison between psychiatrists and psychologists was emphasized. It is interesting to note that more formal and effective research is being accomplished today in the psychological than the psychiatric field. Dr. C. Knight Aldrich's review of the literature points up the problem of poor liaison between the two. Dr. Floyd O. Due, who did the report on foreign literature during our period of study, found little of significance on this point except Gillmann's(4) article on the British method of officer selection. A board of psychologists and psychiatrists examined officer material using thematic apperception tests, intelligence and word association tests. Officer failures in training schools fell from 20-40% to 1%. Caldwell(1) reports that the concept of the neuropsychiatric team composed of psychiatrist, psychologist, and social worker has been placed in effect in all army echelons. Our present testing methods as a prediction of stress, tolerance, and general military

[1] Read in the Section on Military Psychiatry at the 105th annual meeting of The American Psychiatric Association, Montreal, Quebec, May 23-27, 1949.

adaptability are woefully inadequate. Aldrich points out that there is an evident need for more objective evaluation of short-cut methods for the induction board psychiatrist.

Considering the importance of the preventive psychiatric concept and its extension from training to combat level, the literature has been scant since Appel and Fleet's(5) classical paper. Aldrich reports 6 papers stressing the morale and motivation factor as an antidote to psychiatric illness. Kraines (6) discussed the importance of the extension of this concept in civilian life and offered practical suggestions on organization, particularly liaison between certain social and government agencies. There is a marked neglect in the application of preventive psychiatry to both the civilian and military way of life. Murray in his account of Air Corps experiences pointed out the responsibility of the Military Command in recognition of the preventive psychiatric concept.

The importance of the motivation of the soldier as the strongest sustaining force against the development of regressive psychiatric symptoms was emphasized in the postwar literature by Menninger, Plesset, Jonas, Kasanin, Hastings, Wright, Glueck, and many others. During the war, it was found that our selection methods based upon civilian standards offered an inadequate prediction index of the soldier's success or failure under the complex and ever-changing pattern of military life. It became futile to eliminate or discharge all soldiers with psychiatric irregularities. The importance of the supportive factors such as morale, group identification, and leadership became apparent. There has not been adequate research on the psychiatric determinants of good or bad morale. Nor have there been sufficient studies of the factors, still largely unknown, that constitute the successful soldier and officer.

The survey of the literature revealed very definite neglected areas that require research, some of which have been mentioned. There is also a need for more adequate follow-up studies and reports on the residual symptoms of combat exhaustion, particularly by those who have had contact with its earliest stages. A good evaluation of the effects of combat exhaustion from the viewpoint of manpower resources and the utilization of such cases for future military service is needed. The studies of mental illness among Negro troops, and the effects of racial segregation and discrimination on the potential military value of the Negro soldier have been insufficient. Frank's(7) analysis of psychiatric illness in above-average Negroes is valuable sociologically as well as to the army. Hunt (8), Ripley and Wolf(9), and Stevens(10) have written on this subject. Stevens believes the emotional problems in Negroes may be prevented to some degree by abandoning the policy of segregation. Finally there was a need for more psychoanalytical research as applied to specific military needs and problems.

The committee attempted to survey work now going on at various centers to supplement its study of the literature. Thirty-five medical schools, 19 agencies and institutions, and 10 committees and organizations were questioned on the research in military psychiatry. Seven universities reported active programs, namely, Yale, Massachusetts Institute of Technology, Michigan, Washington University, Chicago, Illinois, and New York University-Bellevue. Work at other universities is being carried on by individuals or small groups. Washington University reported a fairly comprehensive follow-up study on the aftereffects of combat exhaustion. They observed that the aftereffects of neuropsychiatric breakdown incurred under active combat conditions would outlast similar breakdowns incurred during the training period. Chicago and Illinois report a controlled study dealing with the selection problem, utilizing students of incoming classes as material for study. The aftereffects of brain injury are being studied at the University of Chicago and New York University-Bellevue.

Yale had the best planned, cooperative approach necessary to answer some of the pressing problems posed by the War Department. Quoting Dr. Clements C. Fry of Yale, "We interpret Colonel Bauer's statement to mean that the War Department would like to know among other things, how frequently certain psychiatric conditions are seen in this particular age group; how common are mood disturbances, anxiety states, panics, and so

forth; and what is the incidence of recovery among those having breakdowns, and the subsequent level of function." Yale used several allied departments for their comprehensive research.

The committee realizes projects may be under way at other universities from whom we received no answers to our inquiries. Other projects are undoubtedly being carried on under security regulations. However, it is significant that 15 leading universities reported no activity of any kind in the field of military psychiatry.

Among the agencies contacted, the Joint Research and Development Board stated that their program was still in the formative stages. The recently organized committee on medical sciences of the National Research Council will work with the committee on human resources of the above Board. The Navy reported in August of 1947 one active project under consideration concerned with screening, selection, and placement of recruits. Seven projects had been submitted by civilian institutions and had been approved by the Navy Neuropsychiatric Branch. They were under consideration for financing by the Research Division of the Bureau of Medicine and Surgery. The Army Air Force reported 4 active and 10 planned projects. More specific work was seen here in attempting to meet the needs of the Army Air Force, such as the analysis of the successful pilot, and the study of accident proneness as it applies to the flier, and so forth.

The Federal Security Agency, Saint Elizabeths Hospital, reported a specific program in military psychiatry designed to train psychiatrists in methods of group psychotherapy. The United States Public Health Service was conducting no research in this field. In the Army, Dr. William Bleckween's project on the reorganization of the Medical Department was cited. Dr. Calvin Drayer, chairman of the committee on potential emergencies of the Surgeon General's office, said that there were a number of projects under the supervision of the Surgeon General, the details of which are still restricted. He felt that many recommendations had been made, but that little actual research was being done. Caldwell says that research has been hampered by the lack of trained personnel. He mentions in the February 1949 AMERICAN JOURNAL OF PSYCHIATRY the present programs in manpower selection and preventive psychiatry, and the psychophysiological factors in neurotic behavior patterns. The 3 projects reported to us by the Veterans Administration are included in the 9 listed by the Research Council. Additional projects of which we have no specific information are undoubtedly now under way.

It seemed to the committee that an insufficient proportion of the universities or other research resources were being applied to the pressing demands of the War Department, or to the neglected areas of research emphasized in our survey of the field. Nor did the current research or literature show evidence of coordinated research planning to meet specific needs. We may mention these needs of the War Department as Colonel Bauer saw them in a letter written April 9, 1947: "The ground work is required for a true evaluation of the mental capacities and adaptability of our national population so that manpower can be used more effectively during times of National Emergencies. Secondly, the development of psychological methods and preventive psychiatry is necessary to minimize the losses of manpower due to psychiatric causes."

In order to further the development of coordinated research planning, a closer liaison was recommended between our committee and the War Department, also the Research and Development Board and the Committee on Medical Sciences, as well as the Committee for Cooperation with Government Agencies of G. A. P. It was further suggested that our committee cooperate in the publication of a newsletter that will digest and consolidate information both in Federal and civilian research in military psychiatry. The JOURNAL presents results of research long after accomplishment, too late to be of service to research men interested in current projects, thereby making coordination and over-all planning impossible. This publication could contain an index of planned research as well as work in progress. The very important information on organized Federal research would thus be made available. Such a publication might also stimulate more

interest among a wider audience in this particular field. Finally, it was suggested that our committee might investigate the possibility of a permanent research panel or board in the area of military psychiatry, whose main function would be the coordination and initiation of research activities.

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PSYCHIATRY AND REHABILITATION IN A MILITARY SETTING[1]

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Although the goal of rehabilitation of casualties during World War II was a commendable one, it frequently failed to achieve its purpose. Some of the causes for this failure impressed me so strongly at the time when I helped organize and conduct a rehabilitation unit that I felt they should be written about. After a lapse of 4 years, with memories cooled, the perspective longer, if not deeper, and the world an armed camp, the subject may still have some value.

Psychiatry provided the greatest impetus to scientific thinking about the rehabilitation of war casualties by emphasizing the importance of considering the total personality in the total environment—the so-called holistic concept. The medical officer, however, was quite unaware of this viewpoint, and regarded the individual as a collection of vulnerable organs upon which to exercise his therapeutic skill. It was necessary to orient him in order to establish an effective rehabilitation unit in our hospital, a 750-bed station hospital located in southern England. The commanding officer gave this job of orientation of doctors and organization of a rehabilitation section to the psychiatric and orthopedic departments.

The doctors assigned to the task tackled it with enthusiasm, and had visions of revolutionizing the care of patients, not only in the Army, but in civilian life after the war. Indeed, some few hospitals in Great Britain had already taken steps in this direction, particularly those institutions caring for industrial ailments. That our country now recognizes the importance of rehabilitation following injuries and after many types of illness is attested to by the large grants given medical centers for expanding this program, and by the admirable sections of the Veterans Administration hospitals devoted to it. Medical science has at last given full recognition to the need for "following through" in the care of the ill and the injured to the point where the individual again becomes an effective member of society. By doing so, medicine has enlarged its boundaries immeasurably.

The importance of a rehabilitation program in the armed services is little questioned today. By means of it, men are quickly returned to duty, and the unfit are most effectively eliminated. The prevention of "hospitalitis," so lowering to morale, is one of the most satisfactory results of the program. Mild psychiatric cases do far better in a rehabilitation unit than in a hospital. It was our experience that many types of cases do better in a small rehabilitation unit attached to a hospital than in the large centralized camps set up for that purpose.

As mentioned previously, the commanding officer of the hospital assigned a psychiatrist and an orthopedic surgeon to organize, administrate, and serve professionally the rehabilitation section of the hospital. Ward buildings in a relatively isolated part of the hospital were used as barracks to house the trainees, as the patients were called who were sent to the rehabilitation section. The trainees were grouped in army units governed by commissioned and noncommissioned officers, themselves rehabilitation patients. These units were subject to certain hospital rules, but everything was done to avoid the hospital atmosphere. It was almost as though the rehabilitation unit was merely attached to the hospital for quarters and rations. To this was added the necessary medical guidance to ensure the individual's speedy return to good health.

The hospital personnel, who supervised the rehabilitation unit, consisted of the 2 aforementioned medical officers, together with 2 clerks and 4 gym instructors, all of whom had noncommissioned ratings. The unit was large enough to accommodate 120 trainees. Each ward or barracks was in charge of a senior officer trainee, who was directly responsible to the medical officer in charge of the unit. The clerks kept the

[1] Sponsored by the Veterans Administration and published with the approval of the Chief Medical Director. The statements and conclusions published by the author are a result of his own study and do not necessarily reflect the opinion or policy of the Veterans Administration.

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records, and helped organize various classes for reviewing military art and science. The gym instructors were carefully instructed respecting each man's illness, and could cope with many difficulties that arose during exercise periods. When a patient arrived in the rehabilitation section, he was greeted by one of the medical officers in charge, and the program with its objectives was thoroughly explained to him. He was assigned to a platoon composed of men with similar difficulties and experiences, as far as it was possible to do so. He was introduced to the patient officers in charge of his platoon. Depending on his condition, a schedule was given him that ensured a full day's activity. Each week he was graded by the medical officer, and the rigor of his assignments increased, if he seemed capable of accomplishing the more difficult tasks. The medical officers held sick call, did the rating examinations at regular intervals, discharged the patients to duty, or made other dispositions.

Certain appliances were needed to help restore injured areas of the body. A gymnasium was fitted up after some petty pilfering of needed supplies, plus a vast amount of improvisation by the skilled carpenters of the unit. All kinds of ingenious devices were designed for exercising the damaged parts. Even an obstacle course to retrain deficient muscles was designed and constructed. However, we soon discarded the obstacle course as a psychological hindrance, for we found that the men did not take kindly to obstacle courses of the usual type. They considered them an insult to their status as combat veterans.

Every patient in the hospital, except those to be transferred to another hospital, or those to be sent to the Zone of the Interior, was assigned to the rehabilitation section before discharge. Included were those psychiatric cases thought to be rehabilitatable for duty without further treatment at a neuropsychiatric center. These comprised, for the most part, simple anxiety states and adult maladjustments, mild combat exhaustion states, and character disorders of a less severe degree. By far the chief problems encountered in the entire group of patients in the rehabilitation section were emotional in nature; the sick call held each morning became the function of the psychiatrist rather than the surgeon, who shared the medical responsibilities for administering this section of the hospital.

The plan in action worked relatively smoothly for a time. At the start, most of the medical officers were a bit suspicious of it, and had to struggle to undo all the attitudes which so sharply delimited the doctor's job. However, they were willing to go along with it, since it seemed one way of getting the medical and surgical convalescents, as well as the baffling psychiatric cases, off their hands. The value of the plan, however, slowly impressed itself on the great majority of the hospital staff.

The most important aspect of the rehabilitation program was the attitudes of the medical personnel supervising, examining, grading, and treating the trainees. The physician sets the tone of the entire program. His attitudes toward the patients influence all other personnel dealing with them, for good or for ill. Many simple conditions were made worse by the clumsy handling of these patients. It was always painful to observe such situations. To call it by the high-sounding name of iatrogenic does not cloak it with medical immunity. The clumsy handling of patients—in which is implied a general lack of sensitivity to the emotional factors involved in each problem—kept the sick call heavy with repeaters. It was found that the psychology of the convalescent combat veteran required a special empathy which involved an understanding of what war can do to the individual.

The morale of the combat veteran who has been hospitalized becomes somewhat more brittle, and has to be nurtured back to full strength with some care. Awkward questions, aggressive attitudes, sentimental poses on the part of the medical officer have increased morale difficulties. Some of these psychological blunders were commonplace enough throughout the Medical Corps, but they were always reacted to with much bitterness by the convalescing combat veteran. For example, a stock question, always sharply stated, by one medical officer was, "Is there any reason why you can't return to full duty?" This query, to a soldier with the memory of fairly fresh wounds, often evoked

angry feelings perforce suppressed and led to situations that defeated the goals of rehabilitation. This type of interrogation may be especially bad if the patient has previously signified a willingness to return to duty, or has merely stated that he felt physically fit. Another example: The question, "Are you ready for combat duty?", if accompanied by a commiserating sort of smile by the physician—a cross between a feeble attempt at levity and an expression of sympathy—is not at all appreciated by the soldier returning to combat. Ward officers often sent patients to the rehabilitation unit with the statement: "Exercises will cure your difficulty." This type of dismissal of the patient occasioned many subsequent visits to the sick call with the protest that exercise, far from curing the difficulty, had made it worse. These examples militate against that most important objective: The return of the soldier to the line of battle in the best possible frame of mind. Physical fitness is relatively easy to attain when this is accomplished.

Perhaps it sounds like an oversimplification to state that such questions or remarks could produce severe morale difficulties in a stable personality. But multiply such instances by the many times they occur in the course of convalescence, and bear in mind the stresses of battle memories, and it is not hard to believe that even a very sound individual will be prone to have emotional upsets. I have witnessed this many times in those who expect to face possible disaster again. Occasional clumsy treatment of patients by medical officers will be denied by none; that this helped to swell the sick call ranks and precipitated psychological difficulties will not be so well accepted. I have noted that as little a thing as an expression of surprise on the face of an examining medical officer, that a severe wound that had healed leaving a very ugly scar did not trouble a patient enough to produce complaints, made the latter ponder this surprise long enough to actually provide the complaints that had seemingly been expected. It should be added that this patient was a relatively stable person.

Before long it became quite evident to the medical staff, even the least intuitive among them, that the good and potentially good candidates for return to combat could suffer a loss of morale when constantly faced with certain psychologically insensitive attitudes on the part of examining physicians. The Chief of our Medical Service was a sensitive observer and was impressed by these facts. He did his best to cooperate in the program and tried to overcome much inertia and indifference on the part of the general medical staff. The results fully justified his confidence in the value of the rehabilitation section as an integral part of the hospital setup. The percentage of those returned to duty rose very measurably over what it had been prior to the installation of this section.

The personnel involved in the rehabilitation program began to have the exuberant feelings that accompany a sense of accomplishment. This was not to last long. Unexpected, and from our viewpoint senseless, transfers of key personnel began to occur. Replacements, when available, were too often of an inferior caliber. The transfers had the demoralizing effect of breaking up a well-knit staff, who had learned to work together in the most effective fashion. The importance of this was often preached in the Army, and more often abused. Irresponsible transfers of personnel is something that the military should consider one of its most serious problems. The philosophy of some old-time regular Army men, that one unit is much like another, that it doesn't matter how often a man is transferred, if he is a well-adjusted individual, is true only in part. Early in a man's military career, he forms friendships quickly. They are often strong friendships. Each time these bonds are broken by a transfer, it becomes increasingly difficult in the military milieu for the man to relate himself warmly and loyally to others. Without doubt, in a wartime armed force, certain exigencies make the shifting of men inevitable. But this should be done with care and must never be the whim of a command function.

Thus, as the gaps in our rehabilitation section were filled by others of indifferent quality, the morale of the section began to drop, and with it, our earlier successes in rehabilitating men for duty. Our head-

quarters, never too sympathetic with what it regarded as a kind of foreign body in the hospital, then took steps to eliminate the rehabilitation section by ordering all patients transferred to the huge rehabilitation camps that had sprung up in various areas. We transferred our trainees to one of these camps, and closed the section. Soon we received many disgruntled letters full of complaints about these oversized camps. The former patients told how much more progress they had been making in our little unit. The chief reason for this was the more frequent personal contact with the psychiatrically oriented medical officer of the unit, who was better able to build up the veteran combatants' morale than all the calisthenics, special exercises, and games so emphasized at the giant rehabilitation hospitals.

Some *conclusions* can be drawn from the experience of trying to rehabilitate soldiers for further duty. First, with respect to the quality of medical officers in key positions, it may be said that, if careful psychiatric screening of enlisted men is of great importance, that of officers is even more so. Morale problems would be much reduced if this were done more carefully. Second, the emphasis of inspections in military hospitals should be less on the campaign against dust, and more on morale of staff and patients. Antisepsis and sterilizing can be carried to such an extreme that they enter the souls of men as well as their houses. Third, since the great majority of cases can be rehabilitated within the hospital, the large centralized rehabilitation camps can be greatly reduced in number, if not eliminated. The soldier may go at once to the replacement depot from his hospital. Fourth, it is important that a psychiatric specialist or a medical officer well versed in mental hygiene be in charge of the hospital's rehabilitation section. He should be permitted to choose the personnel to be assigned to this service. The number from among whom he could choose could be expanded if all medical officers on induction were oriented in basic psychiatric principles. This orientation of medical officers would be of more value to the military service than the drills, bivouacs, lectures on administration, tactics, map reading, military courtesy, and many other items—all of unquestioned value—but all done to considerable excess in training the medical man.

Someday, perhaps, the concept "military" will be obsolete. So long as it is not, we must give some thought to matters that concern it. Much has been written about the cruelty of war, much of it lip service. But war is cruel. The sufferings of the mind and the emotions are by far the worst to be endured. If, in some way, we can make the soldier's lot a better one, we must not spare the effort. This paper, in a small way, has attempted that.

EFFECT OF TRIMETHADIONE (TRIDIONE) AND OTHER DRUGS ON CONVULSIONS CAUSED BY DI-ISOPROPYL FLUOROPHOSPHATE (DFP)[1]

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The anticonvulsant properties of trimethadione were originally disclosed in animal experimentation(1) by its action against artificially induced fits. Like dilantin, which has a similar history(2), trimethadione is now used in the treatment of disease. It possesses a recognized place in the prevention of the petit mal triad(3). Though it is not recommended for the treatment of the grand mal type of epilepsy, insofar as prevention is concerned, it seems of definite value in the alleviation of status epilepticus, or long-enduring fits, when administered after the convulsions have set in(4). Because of this favorable influence in status it was decided to examine the effects of trimethadione upon the convulsions produced by the intracarotid injection of di-isopropyl fluorophosphate (DFP), a drug which increases the concentration of acetylcholine by inhibiting the enzyme cholinesterase. Because this enzyme accelerates the breakdown of acetylcholine the administration of DFP causes the accumulation of acetylcholine in the body. Such a study was made possible by the disclosure that DFP could produce electrical patterns similar to those of major convulsive seizure patterns that were maintained over periods of ½ to 1½ hours(5).

Method.—Rabbits were placed under pentothal anesthesia in order to expose the vessels of the femoral triangles as well as the 2 common carotid arteries. The trachea was cannulated, the scalp resected, and monopolar leads were forced through the skull (6) over each cerebral hemisphere and the cerebellum; the ears were used as sites for indifferent electrodes. A precordial lead was also used to aid in following cardiac function. An initial dose of 0.02 mg/kg of atropine sulfate was usually sufficient to prevent excessive bradycardia; if not, additional doses were given as required. The total amount, however, was not sufficient to interfere with the cerebral effects of DFP. The animals were curarized and maintained by artificial respiration. The DFP was injected into the right common carotid artery and the dosage was increased until the electrical pattern of a seizure was produced. Trimethadione,[2] in 5% solution, was injected intravenously in 10 experiments after the convulsions were established, and in 23 other experiments at various time intervals before DFP. The comparative effects of intravenous atropine, phenobarbital, and pentothal were also studied. Dilantin on the other hand was given by stomach tube. Determinations of cholinesterase activity were made in 6 instances when trimethadione was administered after the convulsions had been established and in 19 instances when trimethadione was given before DFP. Cholinesterase activity of various cerebral areas was estimated in the experiments in which the anticonvulsant action of atropine was tested (Fig. 3). Blood pressure was measured directly from the femoral artery and was maintained within normal limits.

Results.—Trimethadione given intravenously stopped grand mal electrical patterns and in addition restored the normal EEG in each of 10 observations: in 8 the effective dose was 200 mg/kg and in 2 others 300 mg/kg and 400 mg/kg respectively (Fig. 1). In another series of 23 experiments trimethadione was administered before DFP and at time intervals varying from immediately preceding to 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 15, and 18 hours in advance. In the obser-

[1] Read at the 105th annual meeting of The American Psychiatric Association, Montreal, Quebec, May 23-27, 1949.

[2] We wish to thank Dr. R. K. Richards of the Abbott Research Laboratories, North Chicago, Illinois, for a generous supply of tridione.

vations in which tridione was given just before DFP, the anticonvulsant was injected intravenously; in those from 1 to 18 hours before, DFP 500 mg/kg was administered by stomach tube. Though increased electrical activity was manifested in each experiment the grand mal type was not evoked till intervals of 15 and 18 hours after the previous administration of trimethadione (Fig. 2). In all the observations in which colinbarbital cured the convulsions in doses of 17 and 20 mg/kg in 3 observations. Convulsions were prevented in 2 observations in

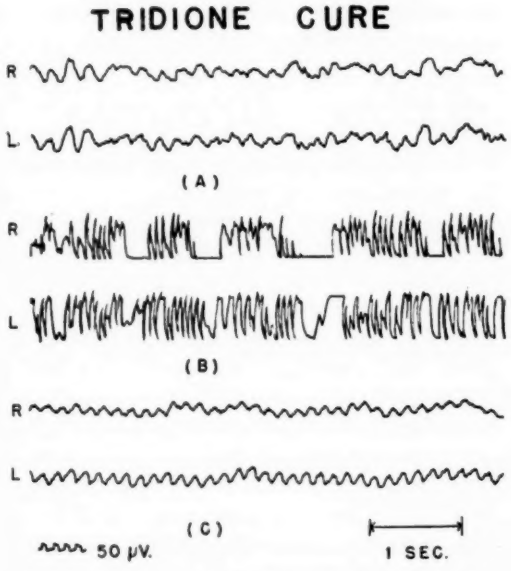

FIG. 1.—R and L indicate tracings obtained from the right and left cortical leads respectively. A shows the control tracing, B the convulsant pattern obtained by the intracarotid injection of 1.5 mg/kg of DFP; C exhibits the restoration of the normal pattern after the intravenous injection of 200 mg/kg of tridione.

esterase activity was determined the values were less than 1% in the various parts of the brain: cerebral hemispheres, midbrain, cerebellum, medulla.

Atropine in 6 experiments was curative in doses ranging from 0.27 to 0.51 mg/kg. Atropine given before DFP was protective in doses ranging from 0.50 mg/kg and 1.35 mg/kg but not with 0.20 mg/kg (Fig. 3). Cholinesterase activity was profoundly diminished in all these observations with atropine, and to the same extent as without atropine. Pentothal, injected slowly to prevent a fall of blood pressure, was able to stop convulsions in each of 4 observations with doses of 17 and 20 mg/kg (Fig. 4). Phenobarbital was injected intravenously in doses of 20 and 40 mg/kg (Fig. 5). Because of its peculiar solubilities dilantin was investigated only as a preventive. In 3

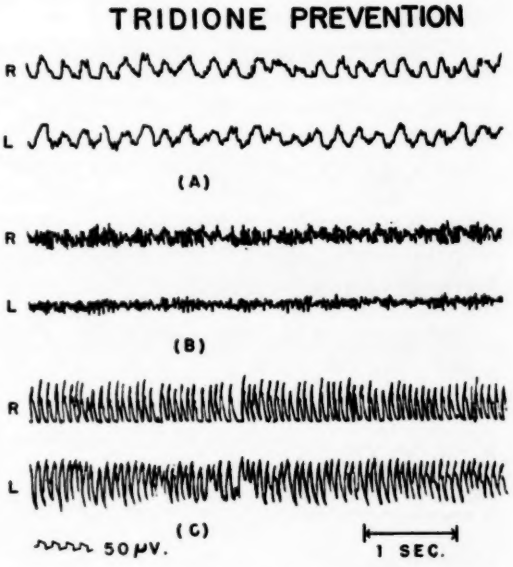

FIG. 2.—A indicates the EEG after the administration of 500 mg/kg of tridione 3 hours previously; B shows the excessive electrical activity after 2 mg/kg of DFP; C indicates the grand mal type of seizure pattern obtained in another rabbit receiving the same dose of tridione 18 hours previously.

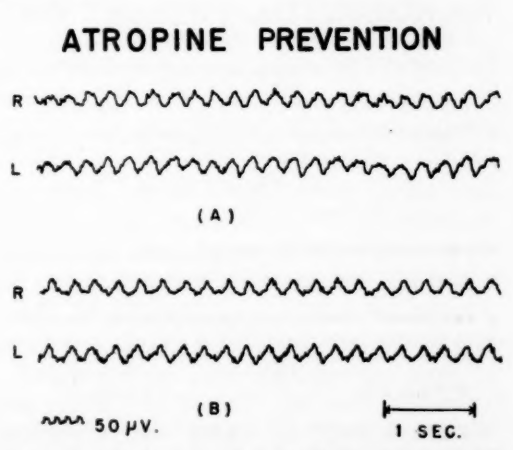

FIG. 3.—A is a tracing obtained after atropine, 1 mg/kg, was injected intravenously; B reveals that 2 mg/kg of DFP did not alter the tracing significantly.

experiments 500 mg/kg were given by stomach tube in 2 divided doses 4 and 2 hours before DFP. Under these conditions the major seizure pattern could not be evoked though here again increased electrical activity was observed (Fig. 6).

FIG. 4.—A shows the record before any injection, B the grand mal pattern evoked by 1.5 mg/kg DFP; C is a recovery produced by the intravenous injection of pentothal. Blood pressure was 89 mm. Hg. at that time, a good value for the rabbit.

FIG. 5.—A shows the tracing after the previous intravenous injection of 20 mg/kg of phenobarbital, B the influence of 2 mg/kg of DFP. Blood pressure 71 mm. Hg.

Discussion.—In these experiments in which DFP is used to destroy cholinesterase, the convulsions are presumably caused by excessive acetylcholine. The action of atropine as a preventive and as a cure is in favor of such a hypothesis. Atropine probably does not interfere with the formation of acetylcholine(7) but rather prevents the propagation of the impulse in the peripheral nerve. Presumably atropine acts similarly in the central nervous system and thus furnishes a basis for its ability to overcome abnormal electrical activity induced by DFP. The preventive effects are seen in Fig. 3, and the curative ones have been demonstrated in a previous investigation(5).

FIG. 6.—A was taken after dilantin was administered by stomach tube; B shows the effect of 2 mg/kg of DFP. Increased activity was visible but not the grand mal pattern. Blood pressure 84 mm. Hg.

Trimethadione, like atropine, stops the grand-mal-like electrical patterns induced by the injection of DFP. That drug may therefore act like atropine and shield the central nervous system from the effects of excessive acetylcholine (Figs. 1 and 2). But there are additional possibilities to be considered especially since, unlike atropine, trimethadione is effective against drugs that are not characteristically anticholinesterases, *i.e.*, metrazol(1, 12). In order to compare the influence of pentothal and phenobarbital with that of trimethadione it may be well to recall that the barbiturates reduce cerebral metabolic rate(10) and at the same time change nerve function(11), elevating the synaptic threshold(8). The elevation of threshold is not equally developed throughout the central nervous system. Probably the areas with

special affinity for the barbiturates are those with the greatest elevation of the threshold. The impairment in transmission caused by the barbiturates is associated with impeded recovery after passage of the nerve(9) impulse. Whether or not trimethadione possesses these same properties is unknown but it is at least suggestive that trimethadione, like the barbiturates, depresses cerebral oxidations(13). In regard to effects exerted on nerve function it may be well to point out that trimethadione and the barbiturates, as well as dilantin, have been found to prevent abnormally induced hyperexcitability in nerves without impairing some of their normal functions(14).

One possible mode of action upon nerve function therefore includes the ability of trimethadione to prevent the neurones from attaining the degree of activity required to produce convulsions. In another communication(18), we have analyzed the mechanism by which DFP induces grand-mal-like electrical patterns and concluded that there are at least 2 factors involved in the process: (a) A low threshold as a result of deficiency in cholinesterase with a corresponding increase in the concentration of acetylcholine. These alterations are associated with hypersensitivity to afferent stimulation and excessive motor response(5). (b) A central mechanism correlating the convulsive activity of the brain, involving cortical and subcortical structures, which synchronizes the convulsive activity of the brain so that it acts as a unit(19). Trimethadione may interfere in the production of the seizure patterns by raising the synaptic threshold. Such a change renders the brain less available to sensory impulses and diminishes the intensity of motor expression. In addition, the elevation of the threshold could prevent the activation of the mechanism correlating the pathologic integration necessary to evoke the convulsive episode.

Two points of clinical interest should be considered. The first concerns the role of acetylcholine in convulsions. We believe that acetylcholine plays a role in the mechanism of action. Not only are these convulsions produced by an anticholinesterase drug but acetylcholine has been found in increased amounts in cerebral spinal fluid after convulsions(15, 20). Moreover, Grob, *et al.*(16) have been able to diminish spiking in the electroencephalogram of epileptics between convulsant periods with the use of atropine. Though acetylcholine may be involved in convulsions, it may act as an intermediary between the precipitating cause of the excessive acetylcholine and the resulting hypermotility. In the present experiments the decrease of cholinesterase permitted the accumulation of acetylcholine. In our estimation the clinical problem is concerned with the mechanism producing the excessive concentration of acetylcholine. The increase in acetylcholine is not due to an acidosis though an acid shift may be part of the picture since an acidosis diminishes cholinesterase activity and permits the accumulation of acetylcholine. Gibbs and co-workers(17) have shown that the CO_2 content of arterial blood continues to rise between convulsive episodes until a fit is precipitated.

The second question is concerned with the apparent contradiction between the excellent preventive effects in our experiments and the poor clinical results against grand mal. Two factors to be considered are: the time of administration in regard to the onset of convulsions and the amount of the drug used. Because trimethadione is destroyed fairly rapidly in the body its preventive action becomes successively weaker with the passage of time after each dose. Thus the amount of the drug becomes important. In curing status Thorne(4) has used 7 grams in 3 hours. The usual dose of trimethadione in the adult is only 1.2 gm. in 24 hours. If trimethadione could be given in larger doses without evoking dangerous side reactions we feel that it would be effective not only as a cure for status but also as a preventive of grand mal.

Conclusions.—Trimethadione in doses of 200-400 mg/kg restores the normal electroencephalogram after the production of grand-mal-like electrical patterns in rabbits by DFP. Trimethadione when administered before DFP prevents the establishment of the seizure pattern, though not of milder types of excessive activity. A profound fall of cholinesterase activity is observed, and presumably acetylcholine accumulates. Despite its valuable therapeutic effects tri-

methadione does not hinder the extreme decrease of cholinesterase activity.

Atropine, like trimethadione, both prevents the electrical seizures and restores the control electroencephalogram after the abnormal brain waves have been evoked by DFP, and yet the cholinesterase activity is also greatly diminished and to the same extent as it is in the absence of atropine. Pentothal has been used successfully to restore the normal electroencephalogram after seizure patterns have been produced. Phenobarbital possesses both preventive and curative effects while dilantin has been used only to keep the convulsive pattern from occurring. Like trimethadione, however, dilantin permits some excessive electrical activity.

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CONTINUOUS SLEEP TREATMENT[1]

Observations on the Use of Prolonged, Deep, Continuous Narcosis in Mental Disorders

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AND

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This report is based on the authors' survey of 70 applications of prolonged sleep in the treatment of psychotic and psychoneurotic patients by the staff of the Western State Psychiatric Institute and Clinic.

During the more than 70 years prolonged narcosis has been described, the terms "sleep" and "continuous" have frequently appeared in reports. Many of the accounts, however, indicate that the subjects often were not asleep, that the process was not continuous, or both. A commonly noted example is the awakening of patients one or more hours daily for purposes of elimination and nutrition. Another is the report that changes in the mental status indicated the necessity of placing the patient in a different diagnostic category during treatment (1-4). In many instances, therefore, patients frequently were not asleep, and the process was not continuous. It would be more accurate to term some of these procedures "repeated daily narcosis."

It is desirable, therefore, to define the procedure that is reported here. The agent used in this series is Cloetta's mixture[2] (5) administered rectally. In occasional cases, when the solution was repeatedly expelled, it was included in gavage mixtures; the details of administration and dosage will be discussed under Technique. The dosage was so regulated that the patients were rendered out of contact for 24 hours per day for 14 to 21 consecutive days. Manic patients were treated for 14 days and schizophrenic and psychoneurotic patients for 21 days.

An indication of the depth of narcosis that obtained in these patients is the reduction or absence of responses to the stimuli of ordinary nursing procedures. Moreover, unpleasant stimuli such as intramuscular, hypodermic or venous injections, and distention of bowel and bladder were followed by absent or diminished responses. When the patient's eyes were open (as was frequently the case) sudden and menacing movements of the arm in close proximity to the eye likewise produced no response.

After the last dose of Cloetta's mixture had been administered at the termination of treatment, the patient was transferred to a convalescent or quiet ward before return to contact, and was released from the hospital as early as possible.

Previous reports (1, 2) on prolonged narcosis have thoroughly reviewed the history of the procedure and are not, therefore, included in this paper.

Numerous theories regarding the mechanism whereby sleep modifies mental states have been advanced; these can be classified as either psychological (6) or physiological (2, 7-9). The authors have no specific contributions to make in this area; therefore, this aspect will not concern them except for a few general considerations. The verbal productions of patients during the induction and reaction stage of narcosis indicate that a rather profound psychological reorganiza-

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[2] Cloetta's mixture, each cc:

Paraldehyde	0.4864 Gm.
Amylenehydrate	0.1593 Gm.
Chloral hydrate	0.1157 Gm.
Alcohol 92%	0.1747 Gm.
Isopropylallyl-barbituric acid	0.0409 Gm.
Digalen	0.0330 mg.
Ephedrine hydrochloride	2.4600 mg.

tion takes place. It is also of interest that experimentally produced, prolonged wakefulness in volunteers resulted in schizophrenic-like reactions(10, 11). There are numerous indications of regression during narcosis; that this may be associated with possible release and gratification of drives, with subsequent "reintegration" is worthy of consideration. Also noteworthy is the fact that intercurrent physical illnesses in psychotic patients are often accompanied by improvement in the mental state—greater accessibility and better contact. This may have some application to the way in which prolonged narcosis operates.

Results

In this series, narcosis was administered 70 times to 57 patients. Four patients had 3 applications, and another 4 patients had 2 applications of narcosis. The procedure was repeated either because complications necessitated premature termination of previous attempts or because a patient who had previously benefited from narcosis had a recurrence of his illness.

The psychotic patients were placed in the following categories:

Home Working.—Patients who made sufficient progress to leave the hospital, made a good social adjustment, and pursued an occupation at a level equal to, or better than, that prior to illness.

Home Not Working.—Patients who had made sufficient progress to leave the hospital, made a social adjustment, but either were not working or were working at an occupation level lower than prior to illness.

Hospital Improved.—Patients who, while having made significant improvement over the state prior to treatment, had not progressed sufficiently to make a social or an economic adjustment.

Unimproved.—Patients who did not make a satisfactory response and many of whom required subsequent treatment.

In most instances, subsequent treatment was prefrontal lobotomy since the majority of the psychotic patients had had previous trials at the various shock therapies. For example, all but 5 of the patients with dementia præcox had had trials of insulin, electroshock, or metrazol, or combinations of these therapies for the attack for which narcosis was instituted. Similarly, all but 3 of the manic patients had had either electroshock or metrazol for the attack for which narcosis was administered. Exact details of frequency and length of series of these treatments were not available in all patients, and it is quite possible, particularly in the patients with dementia præcox, that the treatment was not of adequate length or intensity. The fact that most of them had had some treatment and had not benefited is mentioned only to indicate the type of case material treated in this series.

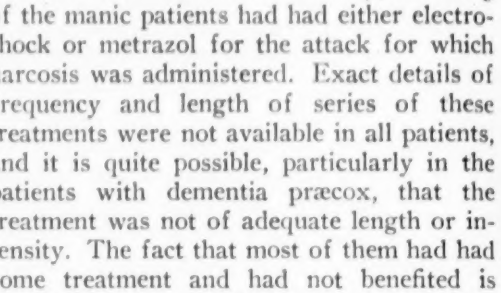

Fig. 1.—Results of treatment in 22 dementia præcox cases. Lower bar indicates what proportion of cases in upper bar had been previously treated with insulin or electroshock. Duration of illness prior to narcosis is also shown.

Dementia Præcox

Prolonged narcosis was administered to 22 patients with dementia præcox. Of this number, 8 patients, 36%, benefited sufficiently to be classified Home Working (Fig 1). Of these 8 patients, 1 relapsed at the end of 2 years and rehospitalization was necessary. The longest follow-up of Home Working patients after treatment is 2½ years (3 patients). One patient is in the Hospital Improved category after 2½ years; this patient made an excellent hospital adjustment and could have been released on trial visit. However, she had been ill for 10 years and had been violent; her family, therefore, was reluctant to have her return home, and efforts to find a suitable alternate plan were not successful. Thirteen patients are Un-

improved or have received subsequent treatment.

Of the 8 patients now in the Home Working category, 6 were excited catatonics, and 2 were overactive paranoids. The duration of illness in the Home Working patients prior to treatment was: over 1 year—2 patients; less than 1 year—6 patients. Hence, of 7 patients ill less than 1 year, all but 1 made a favorable response. This may be contrasted to 13 Unimproved patients; ill over 5 years—3 patients; over 3 years—4 patients; over 1 year—5 patients; under 1 year—one patient.

One fatality occurred and is included in the Unimproved group. Another patient, Unimproved, succumbed during subsequent insulin shock treatment.

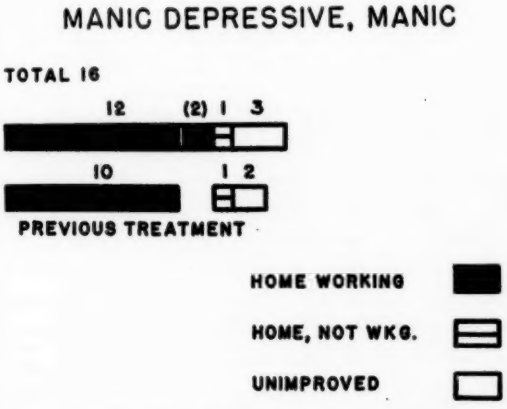

FIG. 2.—Results of treatment of 16 cases manic-depressive, manic. Lower bar indicates what proportion of cases in upper bar had had previous electroshock or metrazol shock.

Manic-Depressive, Manic

The treatment was administered to 16 manic patients of whom 12, or 75%, responded sufficiently to be classified Home Working (2 patients included here relapsed after 2 years—shown as (2) in Fig. 2); one is classified Home Not Working, and 3 are Unimproved or required subsequent treatment. Two of the latter had shown sufficient improvement to be classified Home Working but relapsed, 1 at 12 months, and the other at 18 months. Nine patients have been followed for 2½ years; of these 5 remain Home Working, and 1 is Home Not Working (Fig. 2).

Because of superiority of electroshock over narcosis in the treatment of depressed patients, no attempt was made to treat such patients except for one instance where there was a prominent neurotic component and previous electroshock had not been sufficiently effective; narcosis, likewise, only partially relieved symptoms in this patient.

Psychotic patients who were classified Home Working frequently displayed superficial and variable affect for some time after treatment, and many required 4 weeks to stabilize. Two patients who, the authors felt, might well have subsequently stabilized were prematurely administered electroshock during this 4-week period, which places them in the Unimproved group.

Psychoneuroses

Treatment was administered to 18 psychoneurotic patients. These patients were not suitable subjects for psychotherapy because of intellectual limitations, or they were not progressing satisfactorily in psychotherapy and were so severely handicapped that continued hospitalization was necessary.

Three of these patients presented severe anxiety states, with prominent phobic features under considerable pressure. All 3 were females in their thirties who had fears of harming either themselves or their children. All 3 received narcosis for 21 days, were completely symptom-free after treatment, and have remained so until the present—1 for 22 months, 1 for 18 months, and 1 for 11 months.

Fifteen patients presented either hysteria, or mixed type of psychoneurosis. In 6 of these the removal of symptoms was incomplete but improvement was sufficient for them to leave the hospital and resume a social and economic adjustment. Five additional patients demonstrated little symptomatic improvement, but produced, during treatment, verbal material of dynamic value that was utilized in subsequent psychotherapy; they, too, were able to leave the hospital and resume a social and economic adjustment. One of these was a barbiturate addict. In an additional 4 patients the treatment was of no avail either for alleviation of symptoms or the production of helpful dynamic ma-

terial. Included among these 4 patients were one barbiturate addict and one demerol addict; treatment in both instances was for the neurosis and not for withdrawal of the drug. Two patients with character neuroses and antisocial behavior were treated; one of these also presented a possible multiple personality. The treatment was of no avail in either case.

Complications

Experience with narcosis therapy favorably impressed the members of the hospital staff. The therapeutic advantages were offset, to some extent, by technical difficulties and complications, which tended to limit the use of this treatment. It was decided, therefore, to survey, in detail, the cases that had been treated at the hospital in the 3-year period ending December 1946, to learn which complicating features were more numerous, and, to develop, if possible, means to reduce their incidence and severity. The number of times narcosis had been used up to this time was 34; and the data from this survey led to the establishment of a standardized technique in a control series comprised of the remaining 36 cases being reported. The first 34 cases are known as the Preliminary Series and the remaining 36 as the Control Series.

While the laboratory studies, nutrition, and other details were not as rigidly standardized in the preliminary series as in the control series, the salient features of the technique were generally uniform throughout. Most of the patients were fed by gavage; patients were turned frequently to lessen pulmonary stasis; carbon dioxide-oxygen (10%-90% mixture) inhalations were administered to stimulate respiratory activity; vital signs were frequently observed and promptly charted by the nurse who was in constant attendance. The patients were seen frequently by the physician in charge.

The outstanding complication in the preliminary series was bronchopneumonia, which occurred 14 times in 34 applications (41%). Several of these patients developed pneumonia despite the prophylactic use of intramuscular penicillin. These cases of pneumonia were characterized by the usual physical, chest X-ray, and laboratory findings. This incidence of pneumonia is in keeping with the experience of other workers; Palmer(1) in one of the more comprehensive reviews on narcosis therapy states: "Special mention must be made of pneumonia which most authorities single out as the most important complication." In our series, of the 14 instances in which narcosis had to be terminated prematurely because of complications, pneumonia was the cause in 9. The bronchopneumonia characteristically occurred early in narcosis. It was not fatal in any instance nor were there residual complications or sequelæ. There was a favorable response to penicillin, sulfonamides, or both. In 8 instances, narcosis was continued to completion despite the development of pneumonia. Detailed bacteriological studies of the etiological organisms were not made in the preliminary series.

Suggested explanations for pneumonia included depression of respiratory activity, length of time patients lay in one position, and the possibility of aspiration of mucus or gavage material. Repeated emesis occurred in 7 patients. Vomiting was no more common in those who subsequently developed pneumonia than in those who did not.

One of the main objectives in planning the control series was to learn as much about the factors responsible for the development of pneumonia as possible. The control series was, therefore, divided into 2 categories, one in which nutrition was maintained by gavage and the other entirely by nongavage [3] measures. Each of these was further divided so that one-half of both the nongavage- and the gavage-fed patients received penicillin aerosol(12), 25,000 units every 3 hours. The incidence of bronchopneumonia in the gavage and nongavage groups in the control series paralleled the incidence of pneumonia in the preliminary series when penicillin aerosol was not administered (55% and 40%, respectively). On the other hand, when penicillin aerosol was given there were no cases of pneumonia, either in the gavage or nongavage groups in 17 patients.[4]

[3] Aminosol-Fibrin, a protein hydrolysate, used in this project was supplied through the courtesy of Abbott Laboratories, North Chicago, Illinois.

[4] Four patients, additional to those being reported, making a total of 21, have been treated, making use of penicillin aerosol, without a single case of pneumonia.

It would appear, therefore, that in narcosis therapy the respiratory depression, and the length of time patients lay in one position, combined to lower resistance to bacterial invaders with the result that bronchopneumonia developed. When the bacteria in the respiratory passages were reduced by the administration of penicillin aerosol, this factor offset this lowering of resistance and pneumonia did not occur. Bacteriology of the pneumonias in the control series was characteristically a mixed infection type.

Pulmonary emboli, secondary to lower extremity phlebothrombosis, occurred bilaterally in one patient and caused the only fatality in the series.

There were no outstanding differences in the other complications and variations in vital signs in the preliminary series as compared with the control series, and these observations are combined as follows:

1. Tachycardia over 100-per-minute occurred in the majority of patients, made its appearance early; it was observed throughout the course of narcosis in about two-thirds of the patients.
2. Tachycardia over 130-per-minute occurred occasionally in about two-thirds of the patients, and was more common in the induction period.
3. Hypotension, under 90 mm. systolic, occurred in over two-thirds of the patients, was usually seen during induction; this was effectively combated by the intramuscular injection of ephedrine or epinephrine. In one patient serious cardiovascular collapse occurred on the first and second days, was successfully treated by epinephrine and ephedrine, so that the patient was successfully carried to the completion of 21 days of narcosis, which was not effective; subsequent insulin shock treatment was administered, and the patient succumbed during coma, mechanism of death being cardiac.
4. Fever over 100.6° occurred in over two-thirds of the patients and was not characteristic in its appearance as being either early or late. In 3 patients fever over 104° was observed in the reaction stage, after the administration of Cloetta's mixture had been discontinued.
5. Respiration over 25-per-minute was seen in the majority of patients, appeared early as a rule, and occurred throughout the treatment in about one-third of the patients; shallow respiration was also commonly noted.
6. Cough occurred in two-thirds of the patients (independent of the use of carbon dioxide-oxygen 10%-90% mixture), intermittently during treatment; it was noted throughout treatment in about one-third of the patients.
7. Singultus occurred in one-third of the patients and appeared intermittently during the course of treatment.
8. Emesis occurred in one-half of the patients and characteristically appeared during, and in the several days following, induction.
9. Cyanosis occurred during 18 narcoses and appeared irregularly during treatment.
10. Extreme motor restlessness occurred in 5 patients and characteristically appeared late.
11. Myoclonic twitchings occurred in 8 patients and appeared irregularly throughout the course of treatment.
12. Convulsions occurred in 6 patients; in 4 of these they occurred after administration of Cloetta's mixture had been discontinued at the end of treatment.
13. Diarrhea occurred in 7 patients and appeared late in treatment.
14. Pyelonephritis occurred in 3 female patients, one instance early in treatment, another in the middle of treatment, and the third at the end of treatment.
15. Cystitis occurred in 1 female patient, who was catheterized daily, on the thirteenth day.
16. Atelectasis occurred in 2 patients in the control series, neither of whom was receiving penicillin aerosol; in 1 patient it occurred midway in treatment, and necessitated termination of treatment after 13 days; in the other patient it occurred on the twentieth day and treatment was carried through the twenty-first day as planned.
17. Hypertension over 150 mm. systolic occurred in one patient who had not previously demonstrated hypertension; it did not interfere with treatment. One other patient who showed widely fluctuating values of blood pressure before treatment, ranging from 130 mm. to 180 mm. systolic, continued to show these wide variations during treatment, which was successfully carried through 21 days.
18. Urticaria occurred in 2 patients, 1 of whom was receiving penicillin aerosol; the other patient was allergic to the protein in the gavage mixture.

Laboratory Studies

Laboratory results in the preliminary series indicated isolated instances of hyperglycemia and hypoprotenemia. It was decided, therefore, to follow the metabolism [5] in the control series by determining various plasma, serum, and cytological elements in the blood before narcosis, on the third day of narcosis, weekly during narcosis, and 3 days

[5] Papers reporting, in detail, the metabolic and other medical aspects of this study have been prepared in collaboration with Paul Rike, M. D., the internist who participated in the survey, and are to be presented for publication.

after termination of narcosis to ascertain the amount and type of change occurring in induction, during narcosis, and in reaction from narcosis.

The following procedures were utilized:[6] (1) intravenous glucose tolerance test, (2) serum protein levels, (3) serum cholesterol, (4) nonprotein nitrogen, (5) blood calcium, (6) blood phosphorus, (7) serum chlorides, (8) bilirubin, (9) cephalin flocculation, (10) urine sugar and albumin, and (11) hemoglobin determination and erythrocyte count.

In addition, chest X-rays and electrocardiograms were made before treatment, during induction, weekly during treatment, and during reaction. Each patient's weight was recorded before and after treatment.

All patients lost weight with the exception of one who gained 3 pounds. The weight lost varied from 0.25 pound to 19.5 pounds with an average of 10.1 pounds; there was slightly more weight loss in the gavage-fed group than in the parenterally fed group.

Protein metabolism appeared to be adequately maintained in both the groups that received feedings by gavage and by intravenous infusions of protein hydrolysates and glucose preparations. Those fed by gavage received 47.5 grams and those fed parenterally received 100 grams daily.[7]

Twenty-four cases showed elevated glucose tolerance curves. This may be on a basis similar to that of hyperglycemia in patients in anesthesia(13-16). One schizophrenic patient was found to have an elevated curve prenarcosis. Since some of the patients had not been taking adequate diet before narcosis and during narcosis (carbohydrate intake was 105.5 Gm. for gavage-fed, and 140 Gm. for parenteral-fed groups), instances of elevated glucose tolerance curves may be expected since Conn(17) and others (18) have demonstrated that abnormal curves will occur if insufficient carbohydrate has been consumed during the period prior to the test.

Mild to moderate glycosuria appeared at some time during narcosis in slightly less than half the patients. Eight of these showed abnormalities in the glucose tolerance curve. Mild disturbances of this type have been noted by Horsley(8) in 75% of his cases, most of which were maintained neither at as deep a level of narcosis nor for as long a time as were the patients in this series. Glycosuria—in his experience, as in ours—was usually transient; it was attributed by him to alimentary sources.

The cholesterol level was the only indicator of fat metabolism utilized by us. In all, there were 11 cases with low cholesterol levels at some time, 8 occurring in the parenterally fed group and 3 in the gavage patients. There were 6 cases with elevated cholesterol levels, 5 in the gavage group and 1 in the parenteral group.

Nonprotein nitrogen and blood urea nitrogen determinations were done in most patients. Only 9 cases were completely free of some elevation; 24 cases showed elevations of the NPN. Of the 7 cases that were elevated before narcosis, only 2 were high afterward. Ten cases presented consistent elevations throughout treatment.

Periodic albuminuria was noted in about half the cases. It was present in 2 patients before narcosis and, in one of these, disappeared early in treatment. Seven instances of albuminuria developed initially during the first week, 5 during the second, and 2 after

[6] The diligent and reliable laboratory assistance of Miss Clara Schlessinger is gratefully acknowledged.

[7] DAILY NUTRITION SCHEDULE

Gavage group		Nongavage group	
Gavage Formula			
800 cc. contains:	800 cc.	Aminosol Fibrin	2,000 cc.
Caloric value ..... 1,269.		1 liter twice daily.	
Carbohydrate ..... 105.5 Gm.			
Protein ..... 47.5 Gm.			
Fat ..... 73. Gm.		5% Dextrose in water.....	800 cc.
Salt and vitamins in sufficient daily requirement.			
5% Dextrose in water	1,000 cc.		
Tap water	1,000 cc.		

narcosis had been terminated. These findings parallel those of Horsley(8), who found transient albuminuria in 30% of his cases.

Twenty-seven patients had cephalin flocculation tests performed, with readings of 3+ or 4+ in 8 cases. One determination was 4+ before treatment. Findings of 1+ and 2+ were arbitrarily not considered significant. These test results suggest a transient impairment in liver function. Positive tests are much more frequent in the parenterally fed group, which suggest that gavage feeding may have afforded more reliable liver protection, but this seems unlikely since the amount of protein in the gavage-fed group was only half that in the parenterally fed group. Elevated serum globulin in the parenterally fed group suggests that additional factors may be involved.

Bilirubin determinations were done in 7 cases, and were positive in only 2, one of which had infectious hepatitis.

Hemoglobin determinations, which were closely paralleled by the erythrocyte counts, were either normal or only mildly reduced.

Twenty patients showed, at one time or another, alterations in the level of calcium, phosphorus, or both. Twelve patients manifested abnormal calcium; 15, abnormal phosphorous; and 7, abnormalities in both. Three calcium deficits were present before treatment and rose to normal by the first or second week of treatment. Four cases showed isolated findings of low calcium during narcosis, with normal determinations subsequently. Five cases were low in calcium after treatment.

Technique

Observations from the preliminary and control series provided a basis for formulating the following routine: (Certain of the preliminary and preparatory activities may have to be omitted in overactive and uncooperative patients.)

I. *Preliminary Study of the Patient*

A. History, including systemic review.
B. Physical examination, including a dental survey by the dental consultant.
C. Basal blood pressure determinations: four times daily for 3 days (when indicated by history or physical indication of actual or potential cardiovascular instability).
D. Laboratory studies.
1. Blood chemistry: fasting sugar, nonprotein nitrogen, and bilirubin.
2. Hematology: hematocrit, hemoglobin, leucocyte count, and differential.
3. Urinanalysis: specific gravity, color, albumin, sugar, bile, acetone and diacetic acid, and microscopic examination.
4. Chest X-rays.
5. Electrocardiogram.
6. Additional studies such as blood chlorides and calcium determinations may be desirable but are not essential in most patients.

II. *Preparation of the Patient*

A. General considerations.
1. Adequate food and fluid intake, orally, for the days preceding narcosis and continuing until the time the patient is asleep or unable to swallow.
2. Dental prophylaxis.
3. Ligation of femoral veins may be considered in patients over 40 years of age, particularly when there is a history of previous vascular difficulty in the lower extremities, or where there is evidence of previous or potential cardiovascular disease.
B. Immediate preparation.
1. Cleansing enema the evening before beginning treatment.
2. Sedation the evening before.
3. Penicillin aerosol inhalation, through B.L.B. mask, 40,000 U. q. 4 hours for 24-hour period preceding treatment.

III. *Induction of Narcosis*

A. Patient is placed in a Gatch bed in a quiet, darkened room, receives constant attention of a nurse.
B. Cloetta's mixture, diluted to 10 times its volume in distilled water, is administered rectally with appropriate measures to ensure retention; dosage to be determined and ordered by the physician; the following table is a suggested guide:

Weight, pounds	Dose: Initial	Dose: Maintenance
80-100	6 cc.	4 cc.
100-120	8	4-6
120-150	8-10	6-8
150-180	10-12	8-10
180-over	12-15	10

The maintenance doses may be administered as often as every 4 hours as indi-

cated by wakefulness. Frequency of administration should be carefully controlled by the physician.

Occasionally, in the induction period, particularly with excited patients, larger or more frequent doses may be necessary until the patient is asleep; thereafter maintenance doses, in many instances 2 or 3 times per 24 hours, will suffice.

IV. *Procedure During Narcosis*

A. Nursing care.
1. Daily bath, routine back, eye, and skin care, with special attention to bony prominences. Oral hygiene must receive careful attention. Prompt change of linen when indicated.
2. Turn patient to new position every hour. Move extremities through full range of motion every 8 hours; massage of extremities when ordered, under supervision of physiotherapist.
3. Close observation and prompt charting of vital signs: temperature and blood pressure determination every 2 hours; pulse and respiration every 30 minutes; unusual variations to be immediately reported to physician; chart fluid intake and output.
4. Maintain close attention to voiding and to distention of bladder or abdomen. Catheterization of female patients when ordered.
5. Record noteworthy verbal productions.

B. Routine measures conducted by nursing service.
1. Cleansing enema every second day.
2. CO_2-O_2 (10%-90% mixture) every 8 hours for one minute (less when coughing occurs) administered through B.L.B. mask with a flow sufficient to maintain bag to two-thirds full capacity in expiratory phase.
3. Penicillin aerosol, through B.L.B. mask, 40,000 units every fourth hour, continued throughout treatment.

C. Routine measures carried out by physician.
1. Observation of patient several times daily, particularly during the induction period. The following points merit special attention and institution of indicated procedures:
   a. Freedom of respiratory passages; possible need for aspiration of mucus.
   b. Variations in vital signs.
   c. Bladder distention.
   d. Abdominal distention.
   e. Depth of respiratory excursion.
   f. Oral hygiene.
   g. Eyes: conjunctiva, pupils.
   h. Alteration in venous drainage of extremities—phlebothrombosis.
2. Maintain nutrition.
   a. Requirements may be met by following suggested régime:
      (1) Calories: 2,500 daily for average person of 150 pounds.
      (2) Carbohydrate: 250 Grams
      (3) Protein: 100 Grams
      (4) Fat: 120 Grams
      (5) Vitamin B. Complex: Sufficient daily requirements.
      (6) Vitamin C: 100 Mgm.
      (7) Sodium chloride: 10 Grams
      (8) Liquid to total 3,000 cc. (to be modified as indicated by extremes in temperature and humidity).
   b. Administration:
      (1) The procedure of choice, ordinarily, is to provide above nutritional elements by gavage, dividing the total into 2 or more feedings. Some patients tolerate the tube in place between feedings, but it is well to remove and reintroduce the tube daily.
      (2) When the patients do not tolerate gavage fedings, nutrition may be maintained by parenteral protein and glucose mixtures, supplemented by vitamin preparations.

V. *Termination of Narcosis*

Nursing and medical staff continue routine narcosis measures until patient begins to react. When the patient returns to sustained contact, vital sign observations are made less frequently; oral intake is begun when the patient is able to swallow. Some patients are temporarily overactive at this time and additional personnel or, at times, appropriate restraint may be indicated. The likelihood of convulsions, particularly in patients presenting marked myoclonic jerks, must be kept in mind.

The patient should be transferred to a convalescent ward before he is in sustained contact.

VI. *Convalescent Care* (to be instituted when patient's condition permits increased activities)

A. Nursing care.
1. Nurse in attendance during waking hours until patient is participating in ward activities or leaves the hospital, whichever is sooner.
2. Temperature, pulse, and respirations twice daily.
3. Record noteworthy verbal productions in nurse's notes.

B. Routine measures carried out by physician.
   1. Gradually increase activities; dangling, short periods in chair, and bathroom privileges. (These patients tire easily and conservatism at this point in management is desirable.)
   2. Graded activities either on the ward or in the home, whichever is indicated.

Disadvantage

The outstanding disadvantage of narcosis therapy is the cost, primarily because of the need for constant individual nursing attention. In the ordinary general hospital facility today it would cost approximately $50 for each day of treatment. This represents a sizable expenditure when one considers that manic patients are treated 14 days, and schizophrenic and psychoneurotic patients 21 days. This cost, while considerable, appears less when one contrasts with it the economic loss from inability to work, and the cost of more prolonged hospitalization that might otherwise be necessary for these patients.

Summary and Conclusions

Experience with 70 applications of prolonged narcosis in psychotic and psychoneurotic disorders is presented. One fatality occurred in the series as a result of pulmonary emboli.

Special attention was given to the study of bronchopneumonia, an outstanding complication of prolonged narcosis therapy, and a suggested technique is presented that effectively reduces this and other hazards.

Psychotic excitements, both manic and schizophrenic, respond to narcosis therapy.

Of 7 cases of dementia præcox less than one year in duration, 6 responded well to treatment.

Experience with psychoneurotic patients is not sufficient to warrant conclusions; therapeutic results, however, were sufficient to suggest the possibility that this procedure might be of value in various psychoneuroses, particularly severe anxiety states with prominent phobic features.

The outstanding disadvantage of narcosis is the necessity of constant nursing attention during treatment.

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THE CLINICAL MANAGEMENT OF THE MENTALLY RETARDED CHILD AND THE PARENTS [1]

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The magnitude of the general problem of mental retardation is brought home by the fact that we have an estimated total of 950,000 to 4,500,000 such retarded individuals in our country. But this is only the most obvious consideration. Even more sobering is the realization that there are nearly as many *families* involved. It is difficult to estimate the tragic suffering in a family that has a mentally retarded member. Such suffering is too often aggravated by generous advice from sympathetic relatives, friends, and even professional workers. In all probability our errors are due to (1) lack of understanding the basic issues inherent in each case, and (2) inadequate techniques in assisting parents to plan more objectively.

It seems obvious that in any program designed to help deficient individuals the emphasis must be placed on the family, for upon the family's attitudes and thinking, particularly that of the parents, depends the ultimate success of the program.

The task of helping parents who have a retarded child is complicated. It is not enough to sidestep the issue or to "tell" them that their child is "feeble-minded" and should be institutionalized. In our experience at the University of Minnesota Hospitals the three most frequently encountered errors are: (1) delay in defining the problem early in the patient's life; (2) encouragement of parents by holding out false hopes, which naturally results in disillusionment later when the patient is not cordially received in school or becomes a social problem requiring immediate planning for his management; and (3) too much direct advice and/or urging adoption of a specific plan—too often institutionalization. We physicians sometimes assume that this alone will adequately solve the problem. However, our assumptions usually result in failure for we have not fully appreciated the strong emotional ties that most parents center in the mentally handicapped person. Our own hastily formulated plan often complicates the situation because it increases parental resistance.

Since we have become cognizant of the real and widespread need to offer help to the parents of retarded children we have given serious thought to the development of a *workable* method of doing so. We believe the keynote is the approach to the parents. Several important factors require consideration. Unfortunately most parents still regard mental deficiency as a stigma. In addition they have much real anxiety usually closely related to feelings of guilt. In the majority of instances they try to resolve these emotional problems by assuming an attitude of overconcern and overprotectiveness toward the defective child. This, in a measure, may be protection of themselves. For these reasons we believe, with few exceptions, management of the strong emotional ties that the average parent has toward the defective child is the core of the problem.

Average parents are aware that their child is retarded. We avoid, insofar as is possible, directly telling them what they already know. Parents come to us primarily for confirmation of their suspicions and doubts. Our task is to help parents define their own problems and possible solutions to them. In the process we are able to help reorient parental emotional ties with the defective child and give support and justification to the parents' knowledge.

Our approach to the *study* of any individual suspected of being mentally retarded requires acceptance of several basic principles. We try not to deviate from them.

1. Ample time is provided. If justice is to be done not only to the child involved but also to the parents, it is impossible to hurry. A frequent complaint made by many parents who have been disappointed is, "How does he know our problem? He was

[1] Read in the Section on Child Psychiatry at the 105th annual meeting of The American Psychiatric Association, Montreal, Quebec, May 23-27, 1949.

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with him only a few moments. How does he know our problem?"

2. The study is thorough. *All* factors bearing on the case are carefully considered.

3. Care is exercised in the choice of words used during the interviews with the parents. Each word in our language has associated with it its own peculiar emotional colorings. Some are more emotionally charged than others. Such expressions as "feeble-minded," "moron," "imbecile," and "idiot" are avoided. In their places are substituted "backward," "slow," and "retarded in development."

4. Parents have not only the *right* but the *responsibility* for deciding what is to be done for or with their child. This right is respected by the physician.

5. Parents are encouraged to reveal their own question and doubts. The success of the study depends in a large measure upon how completely and satisfactorily their questions are answered.

6. The physician's attitude in dealing with this problem is no different from that of dealing with any other medical problem. He approaches the problem analytically allowing no personal feelings to interfere with a sound, critical evaluation.

7. The orientation of the social worker and psychologist associated with the physician is also of paramount importance. Each must have a thorough knowledge of his field and an appreciation of his own responsibilities is essential. At no point should anyone become overaggressive.

A complete study of each case involves the following procedures:

1. Initial interview with parents to obtain a complete medical history.
2. Evaluation of the physical status of the child.
3. Psychological testing.
4. Clinical observation of the child.
5. Summary interview with parents.

The initial step in the study is securing a detailed medical history from the parents. More than one full hour is often required. Parents seldom mention the possibility of retardation in presenting complaint. They usually offer some other complaint to explain their seeking help. Recognition of this fact by the physician often encourages parents to reveal unconsciously more than was intended. This is anticipated and encouraged.

A complete case history includes detailed consideration of the following items:

1. Pregnancy history. In the light of recent researches into the influences of various common infectious diseases and dietary deficiencies on the fetus during gestation, this is becoming increasingly significant.
2. Labor, birth, and postdelivery history.
3. Health and accident history.
4. Developmental history, which includes such items as neuromuscular maturation and activity, feeding experiences, speech development, play habits, curiosity, and the unfolding capacity of the child to relate himself meaningfully to parents and others.
5. Family history.
6. Definition of the child's present capacities and abilities. . . . . "In terms of everyday activities what can your child do?"

By this time it has become clear to both parents and physician that the child is not functioning up to anticipated performance levels.

At this point the parents are asked "How is your child different from others of comparable age?" This simple question yields surprising results because it enables parents to delineate more objectively their own thinking and at the same time to evaluate the child himself. As differences are elaborated, the final question, "On the basis of our discussion, how old would you estimate your child to be?" is asked. The accuracy with which the average parents estimate their child's developmental age is remarkable. Their answer helps them by more sharply bringing to focus their own evaluation of the problem. It also provides a logical focus for beginning the final interview.

In the second step of the survey, thorough physical and neurological studies are made together with all essential laboratory procedures. Necessary psychological testing is next undertaken. Such tests are very useful. However, they must be used with caution and interpretation, and always in relation to the rest of the study. It is always essential to know at least 3 things about any psychological testing that is done: (1) What tests were used? (2) What were the conditions of the tests? (3) Who was the examiner? Unless these 3 essentials are known, the test results are of no particular value.

Clinical observation of the child himself

is important. In our experience this is best accomplished if the child is admitted to the hospital for a day or two. The child's reaction to separation from parents, his capacity to adapt to new surroundings, his acceptance by other children in the hospital, and the manner in which he handles his own interpersonal relationships are helpful guideposts. In addition, it provides for continuous 24-hour study. Following this complete survey, the parents are seen in a final interview.

The general plan of the interview is as follows:

1. The parents' suspicions are confirmed.
2. The most likely explanation is given for the child's retardation.
3. Prognosis for the future is considered.
4. Possible solutions to the problem are discussed.
5. Opportunity for parents to ask questions is provided.

In recognition of the increased parental emotional tensions during this final conference, it is the usual rule to review carefully some of the data obtained during the first visit. Parents often are able to supply additional information which in itself is not only helpful but serves to ease their own tensions of the moment.

As stated earlier, parents are helped to estimate the actual attained developmental age of their child during the initial interview. This serves as a starting point for the physician in making his final report. If the study has substantiated the suspicion of retardation, it becomes easy and natural to state, "We agree with you that your child is delayed in his development." Many times one can go a step further by complimenting the parents for their accurate estimate of the child's developmental age.

The fact of confirmation often yields surprising results in itself for it releases the parents of anxiety and enables them to consider plans that otherwise would not have been possible. This is well illustrated by the immediate response of one mother who spontaneously burst out with, "I've known from the time my child was but a few weeks old that she was not developing normally but I couldn't get anyone to confirm it." The child was nearly 5 years old when the study was undertaken. Once the mother's suspicions were confirmed, she was actually freed to "do something about it." This youngster is now satisfactorily placed in a school for backward children.

Next in order is the discussion of probable etiology. Parents want an explanation for the child's retardation. Either consciously or unconsciously they individually feel much personal guilt. As you know, the cause of mental retardation can be placed in one or more of the following large groups: (1) hereditary, (2) congenital, (3) accidents associated with labor or delivery, (4) accidents or illnesses that follow birth, and (5) a miscellaneous group that is related to little understood central nervous system deterioration.

It is admitted that such a classification may have some deficiencies. However, it is one that parents can easily understand and accept.

The next step in the final interview is a full consideration of "What can we do about it?" As was suggested, no one has any right to tell a parent what he must do with or for a defective child. However, the physician has the responsibility to help the parents think through their problems. He does this by considering all possible plans of action and the effect these plans may have on all members of the family. Immeasurable suffering has been initiated by a too hasty suggestion that you "ought to put your child in an institution." Such procedure disregards completely the parents' emotional problems.

No one likes to feel alone with his troubles. At this point we make two direct suggestions, stated in the following manner: "The many people who face this same problem have found it helpful in planning for a retarded child to make two major decisions. One is to accept the child and his deficiencies; the other is to accept the fact that medical science has nothing to offer that will *substantially* alter the developmental pattern of the child."

The four possible solutions to their problem are then outlined to them as follows:

1. The child may be kept at home. Offering this plan first tends to reduce resistance later.
2. An appropriate boarding home may be found—usually in the case of infants.
3. The child may be placed in a church or private school for care.

4. The parents "can take advantage of the facilities which the state offers" by considering "placement" at the state school. Stressing the "advantages" and suggesting "placement" rather than "sending the child away" helps parents over rough spots in this portion of the interview.

Before the family finally decides on a plan that is "right" for them, further suggestions are elaborated in the following order:

1. The child will continue to grow physically. The unevenness of the total growth due to the persistent lag in social and intellectual maturation is carefully considered. In addition, parents are reminded that the differences already noted will become more marked as the child grows older.

2. No parents should undertake the responsibility of planning for one member of the family until the *total needs* of every member of the family, including themselves, are fully considered. Care is taken to speak directly to this point. Trouble usually ensues when parents have disregarded the needs of the other members of the family.

3. In consideration of the above questions, emphasis is placed on the point that all good parents consider fully the needs of each child in the family and try to the best of their ability and circumstances to meet them as adequately as possible. This point is made as it serves the dual purpose of (a) compelling the parents to consider freely the child's own particular needs for deriving as much satisfaction from living as possible and (b) protecting themselves should they decide on a placement plan.

The conference is ended by providing an opportunity for the parents to ask questions and bring out related problems. This is most essential as it makes possible full discussion of issues peculiar to the case and family. In addition, it is possible to deal with the parent's own emotional problems. It is during this phase of the interview that many parents deal directly with the real sources of their guilt and anxiety.

In general, this is our approach to the study and management of every problem of mental retardation. The approach is often varied to meet the emotional needs of the parents. Frequently the child's progress is checked at periodic intervals. In the interim, parents, benefiting from sympathetic understanding of the total problem, gradually develop for themselves greater understanding and more complete acceptance of the reality of the situation. Careful and considerate management on our part enables the parents to deal more effectively with the child and his problems as well as their own.

The question is often raised, "Doesn't this procedure seem to involve a great deal of time?" The answer is "yes," but by spending time on any one patient situation, in doing a thorough, careful analysis, time is actually saved. As parent's doubts and suspicions are confirmed, as their many questions are answered, they are gently freed of their own binding emotional problems. This lessens the need "to shop around," which means in itself a saving of time. But more than that, as parents develop insight and understanding, the child himself benefits by the change in the attitude toward him. Excessive pressures on him are lessened, and, being freed of these, in many instances he responds more favorably than would have been possible otherwise. Finally, if placement is eventually decided upon, parents have the pleasant feeling that their own rights and privileges have been respected.

Three important results have emerged following the use of this approach over the past 5 years: (1) Parents, when given a chance, do make good decisions. (2) Should parents decide on a specific plan such as placement, they can use more constructively the services of the social worker and others who assist the parents in carrying out the plan they have decided upon. (3) This, in turn, has made it possible for the social worker to make a greater contribution to the total welfare of the family. Of equal importance is the feeling of comfortableness the physician has in dealing with a problem that, at best, is most trying and difficult. The confidence he has in understanding the basic problem and his responsibility is of material help in assisting parents with an unpleasant task.

As we all work toward this common end, society is benefited, for its fundamental unit, the family, will have been protected and, in many instances, strengthened.

A PROGRAM FOR ORIENTATION IN CHILD PSYCHIATRY [1]

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During the past two years the administrators of psychiatric clinics for children have been called upon to face a unique problem. At a time when there were great pressures to train a larger number of people for the field of child psychiatry, the needs of the general psychiatric field required consideration. The recognition by the American Board of Psychiatry and Neurology of the advantages of experience in child psychiatry has been part of the more general recognition of the values of such experience. While it is too early to analyze the factors involved, it is possible and perhaps necessary to speculate on some aspects of the shift, if the need for experience is to be met realistically. The experience of World War II emphasized the interrelationship between the individual personality disturbance and the social setting in which the disturbance occurred.

That is to say, the more it was recognized that emotionally disturbed people were both acted upon by, and acting upon, the social milieu, the more necessary it became to consider such factors as morale, fatigue, etc., as they interacted with individuals. This resulted in some alteration of the predominately medical orientation of psychiatry. Some premium was placed on the services of psychiatrists who had worked with social workers and who could conceive of emotional reintegrative experience arising from either individual therapy or a shift in the disturbing pressures of the social milieu. An impression exists that those with experience in the child psychiatry field were conceptually readier to operate in such a reference frame.

In the postwar atmosphere, general psychiatry has continued to shift its emphasis from the individual problem to a more constant consideration of the individual in relation to his social setting, especially his interpersonal relationships. For some(1), this is a dangerous process in that there is a presumed disassociation between psychiatry and the practice of medicine.

It seems more likely, however, that this trend does not represent anything so definitive as a split between "medical psychiatry" and "social psychiatry"; there is a real possibility that the ideology of medical practice itself is shifting. The cultural trend to "socialized medicine" has, on the whole, caused a greater realization that the physician no longer deals with illness per se, but illness in the setting of interpersonal attitudes, family and financial problems. In this sense, neither the general practitioner nor the psychiatrist can afford to remain caught in the idea that it is possible to deal with "the illness" or "the intrinsic personality problem" alone. Inevitably the social milieu is dealt with; the only question is whether the fact is recognized or not and whether, if recognized, it can be dealt with professionally rather than personally.

If it is possible to assume any part of the foregoing as true, then an excellent basis exists for the idea that general psychiatry can profit by the experience which has been gained in the clinical field of child psychiatry.

The collaborative team pattern of the American child guidance clinic has consistently brought the psychiatric personnel into relation with community social problems, social agencies, and educational agencies. Even if such clinics had been able to avoid these interrelationships, the facts of the real dependence of the child upon parents would have brought them back to the impossibility of isolating the problem in the child. Because of such factors, and because, too, of the stimulus afforded by the collaboration with allied professional disciplines, the trained child psychiatrist is enabled to become more readily aware of the interaction between the individual and his milieu. The subtle problem inherent in such training, however, has been that such insight is in no sense a substitute for skill in direct psychotherapy with the child, but rather an added requirement put upon the individual in training.

[1] Read at the 105th annual meeting of The American Psychiatric Association, Montreal, Quebec, May 23-27, 1949.

From the Philadelphia Child Guidance Clinic.

This complication and the status of training methods in general psychiatry have added measurably to the training tasks of psychiatric clinics for children. The result has been that, despite the demand for trained personnel, many clinics will not offer less than a 2-year course following the 2 years in general psychiatry.

The need for experience in child psychiatry clinics on the part of general psychiatrists in training then posed an acute problem on several sides. Granting the legitimacy of the need in the general field to borrow from the quarter century of experience of child psychiatric clinics, the problem has been how to offer what was necessary without the breakdown of a program. The disparity between what was wanted and what was offered was more than between the 6 months' experience recommended by the American Board of Psychiatry and Neurology, and the 2-year minimum standard training recommended by the Association of Psychiatric Clinics for Children. It lay partly in the fact that psychiatric clinics for children offer central training for skill in direct psychotherapy with children, and peripheral understanding of the relationship between the problem in the child and the social reality. Though a few sanguine general psychiatrists suppose that little training is necessary in order to acquire psychotherapeutic skills in relation to children, there is an increasing realization that neither personal analysis nor previous supervised training in the adult field is sufficient. Hence, not many will suppose that the average general psychiatrist in training can become competent with 6 months' experience in direct psychotherapy with the child. If, beyond this, the previous analysis of the need of general psychiatry is correct, then experience in direct psychotherapy with children is not what was either wanted or needed. In any event, administrators of psychiatric services for children are faced with the problem of giving general psychiatrists a short indoctrination of 6 months which will constitute a useful addition to their knowledge and experience. This problem has been solved variously by different training clinics, and hence the solution offered here is not conceived as a panacea, but rather as one way of meeting a difficult problem.

When the Philadelphia Child Guidance Clinic was first invited by the Dean's Committee of the Philadelphia VA Training Program to cooperate in offering child psychiatric experience to VA residents in training, the first reaction was mixed. On one side was the wish to lend the gains in experience in the field, to the program; and on the other, was the conviction that to do so in the clinic setting would be disrupting. Confusion would thus be introduced into the training of regular fellows in child psychiatry, and indirectly the clinic might be placed in the position of sanctioning insufficient training for direct psychotherapy with children.

At this point the possibility of meeting the expressed needs in a different setting was considered. An experiment in training was then embarked upon in the setting of the outpatient department of the Children's Hospital of Philadelphia. The background for this choice may be understood in the reference frame of the analysis of the contemporary problems in general medicine, as specifically applied to the practice of pediatrics, and in the administration of the services of a children's hospital. The mastery of the problems of child nutrition and infectious diseases in children through immunization and the use of new antibiotics has begun to change the emphasis in pediatric practice.

As the practice of pediatrics has become less concerned with a larger number of immediate life-and-death problems, it has become more related to well-baby clinics and "preventive" pediatrics. This orientation has probably placed pediatrics in the vanguard of medical specialties, suffering, so to speak, with so much success, that the nature of the focus of practice changes. Certainly it is true that, as pediatricians master the problems of infant mortality, they have become increasingly aware that the psychological elements of pediatric practice loom much more important. In addition, the pediatrician is more obviously confronted by the fact that, while his patient is the child, the parents are too closely bound to the situation to be ignored. Hence, of all medical specialties, the pediatrician has the best opportunity to take cognizance of the fact that, while he applies medical knowledge to the pathological physiology of the child, he gives

medical psychological service to the family problem created by the child's illness. Out of all this, pediatricians have become much more interested in the applications of psychiatric knowledge to the practice of pediatrics and the administration of children's hospitals. The training program which has been embarked upon to give form and professional approach to the interests of pediatricians in Children's Hospital will be described elsewhere.

It was because of the interest in such a program that the setting for the training of VA residents could be in such a location. It is implicit in this pediatric program that—while the practice of pediatrics with psychological sensitivity in the interaction between pediatrician, parent, and child may be psychotherapeutic in outcome—it is not to be equated with psychotherapy. In this assumption a rationale is created for more or less automatic definition of what may or may not be proper responsibilities for pediatricians to assume in relation to the problems of neurotic interaction between parent and child. Through these criteria, and a previous willingness to have a professional identification with the problems of parent and child (*i.e.*, neither possessive nor rejecting), referral becomes possible to other services beyond the scope of the pediatric-parent-child interpersonal relationship. Such referrals were the backlog of cases to be handled by the residents.

It was agreed that the VA residents would have a maximum of 2 cases daily, 4 mornings weekly for 6 months. Depending upon whether there were 2 or 4 residents, they were to have each either an hour or a half hour of direct personal supervision weekly, and participation with referring pediatricians in 2 staff seminars weekly.

The psychiatric service to be offered was limited in scope by previous considerations. There was the consideration of being related to as large a number of parent-child interactions as possible, which necessarily made for a short contact, since the time both in days and months was short. Since it was already decided that engagement with the problems inherent in direct psychotherapy for the child were to be avoided, and since offering psychotherapy for parents would neither be new for the residents nor welcomed by the parents, the form of the service was fixed rather definitely in advance.

Accordingly, a protocol was written to be distributed to pediatric house officers and VA residents. In this protocol the newly created structure was called, "The Psychological Growth and Development Clinic"—"a parent counseling service." The service offered was 2 interviews for the parents at weekly intervals, with the possibility of one more later or a subsequent set of 2 interviews. These interviews did not, except in unusual circumstances, include the child. The goals of the service, which were to be shared with the parent(s) at the point of intake as part of the mutual decision to use the service, were described in general as: (1) to assist the parent to some single but definitive step in breaking up the painful interaction between parents and child, or (2) to help the parents to a step that would mean owning the interpersonal connotation of the problem in the child, with a chance to return later as the problem is better defined, or (3) if the struggle between parent and child is defined, but appears deadlocked, then direct psychotherapy for a child might be sought at the Child Guidance Clinic as a step in breaking the impasse. The statement to the parents of what the goals might be was to be as nearly in the parents' language as possible.

The two interviews for the parent(s) were in essence a test to see whether, with support, the parental projection on the child as a painful object could move sufficiently to allow emotional reintegration in the child to take place, or whether it could move sufficiently to allow the family to use direct psychotherapy for the child.

The theoretical basis for the conviction that such a brief contact can be helpful in the solution of problems in the parent-child interaction has been discussed fully in a previous communication(2). At a practical level it is quite helpful whether it can be theoretically justified or not. Since the focus of this communication is on the training possibility in the structure of the service rather than in the efficacy of the help afforded, it may be possible to leave the latter point for decision elsewhere. It must be mentioned,

however, that if the service had training, only, as an objective, it would be necessary to conceive of the interviews as having a psychotherapeutic potential, arising out of emotional interaction, and not from any re-educational or insight-giving process.

The completed training structure then offered special-purpose psychotherapeutic interviewing, conferences, and supervision. At this point it is possible to inquire into its efficacy as a training structure, intrinsically, insofar as it contributes to the absolute professional and personal development of the residents, and extrinsically, as it has or has not filled the need of general psychiatry. Insofar as the latter point is concerned, there are certain immediate reality gains. Because of the short contacts and the joint conferences with pediatricians, the VA residents begin to get a comprehensive view of the size of the problem in the children's field. They see or hear of children's emotional problems, as they are reflected in hospitalization, illness, schools, courts, and social agencies. That is, educationally speaking, they are afforded the knowledge of the interaction between the problem and the social milieu; between the individual and his significant interpersonal contacts. As a matter of fact, the VA residents in 6 months are in contact in some way with the gamut of children's problems. In the setting of a children's hospital, they are exposed to many more such problems than fellows in a psychiatric clinic for children.

If such information was all that was sought or needed, it would be a simple training problem indeed. The problem generally speaking, in psychiatric education today, is that there appears to be a surfeit of information and a gross lack of supervised experience in psychotherapeutic interviewing.

The usual reason why the residents have a slow time understanding the significance of this particular training experience does not lie in the lack of knowledge of child development, or in the lack of experience of dealing with the interrelationship between the individual and social factors, though it might be expected to be so. The distinctive universal problem has been a basic lack of understanding of the psychotherapeutic interpersonal relationship. The reasons for this do not appear to be so simple. On one side, it may be that only very recently has such understanding been a basic tool of psychiatry; it has been said that it is quite possible to qualify for the specialty without such skill. On the other side, it appears that preoccupation with unconscious motivation of patient and therapist, as well as with the phenomena of transference, may have blocked the introduction of learning processes which are possible at the conscious level. The result has been that the field of general psychiatry has been groping for an educational process somewhere between didactic lecturing and personal analysis. It would appear that in only a few instances has the interpersonal process of individual supervision been used in psychiatry. Though social work literature(3) is very adequate, there is almost no psychiatric literature on the subject outside the field of child psychiatry. This is a matter which is gaining in importance; it has been the subject of symposia(4) in the American Orthopsychiatric Association, but only recently has a group in general psychiatry given any specific consideration to the subject. The problem expressed in connection with these residents is general throughout psychiatry and has been a problem(5) in the training of child psychiatrists who have been largely drawn from the field of general psychiatry.

Though it is true that personal analysis has largely been the medium through which the knowledge of the therapeutic interpersonal relationship has been gained, it is an ignoring of the reality principle seriously to consider that all psychiatrists will be able to get a personal analysis. The answer to this all too frequently has been to substitute staff conferences or group conferences for personal supervision; a solution which is more conducive to sibling rivalry than emotional interaction. In other instances, interviewing techniques(6, 7) have been made the center of the learning process. Experience in the children's field has been strongly suggestive that the artificial elements of "techniques" alien to both the patient's and the therapist's feeling induce a resistance second only to the punitive use of shock in treatment of compulsion neurosis.

Though it is not possible at this time to

digress into an extensive discussion of supervision as a unique psychological process, it may be said that it is the emotional interaction of this process that permits the student to become aware of the feelings involved in the helping process.

The problem in this particular training program, and in psychiatric clinics for children in general, is that there has been little or no previous use of individual supervision as an interpersonal process. The result is to create a problem in the use of it more related to unfamiliarity with it in past learning, than to neurotic resistances. That this is more often due to identification with successful types of psychiatrists than to earlier factors is shown by the fact that medical students are more immediately able to learn sensitive interviewing skills than are, say, advanced psychiatrists and pediatricians.

In any event, in this program, experience has shown that the engagement in the supervisory process around the learning of basic psychotherapeutic skills becomes so preoccupying that the content of knowledge relating to children's problems and social realities becomes secondary.

As Whitehorn(8) has pointed out, the average student of psychiatry has been so impressed with the rôle of specific traumata in the past history of the person in producing neurosis that the research for causes obscures the meaning of the interpersonal experience. This artifact is really a matter of confusion between education and therapy(9). The average student seeks to learn of "the conflict situation" and to educate the patient about himself. Since, as Alexander(10) has shown, the emotional quality of the relationship affects recall, to deny the place of the patient's feelings about being helped, and the therapist's feelings about helping, is to make the relationship one of struggle.

In the experience with this training program it has been almost standard to find residents coming to the training situation with certain fixed prejudices about the causes of children's problems which can be altered only through the experience of supervision. Perhaps the commonest is the idea that a problem in a child is caused by parental rejection; the next is that the cause is oversolicitude. The earliest experience is usually that the protocol is ignored and the two interviews used for searching for causes in the parents, and then explaining or trying to make the parents admit that they are either rejecting or oversolicitous. This, of course, results in hostile struggles ending with broken second appointments. However, the resident, out of his own experience in being helped to look at his own feelings, as well as that of the parents, begins to know how difficult it is for people to allow themselves to be helped. At this point it becomes possible for him to recognize parental feeling even when it is in a displaced or projected content. He can then learn that, when parents talk about a child, they speak of the reality of the child's problem as well as of their own inner problems as projected upon the child. Gradually it is possible to see that the interviews, focused on the content of the child's problem, acquire a significance for both parent and child.

Another sweeping prejudice seen at the conscious level is in the tendency of residents to assume the total responsibility for parental shift. Though the initial contract is for 2 interviews, to accomplish perhaps only a single step, it becomes the pressure of time on the resident to solve the problem for the parents, rather than allowing the limited time to exert its own pressures on the parents, instead of the physician. It may be seen that the resident assumes the impulse to reintegrate instead of the parents. This, too, seems to be a basic fault in psychotherapeutic interviewing, arising from the idea that the doctor does therapy to a patient, and not with him.

Pursuant to the same principle, apropos of what residents can be helped to in conscious awareness of parental attitudes, it is possible to show that, where parents come impelled by a third party, nothing is accomplished until adverse feelings about taking help have been fully aired. Simple as the 2-interview plan is, it mobilizes all the resistances that people have in seeking any psychological help, and yet points up the fact that every step, from the time of making the appointment to the interview itself, is significant as a beginning of reintegration.

In the content of 2 interviews about a

child's problem, it is possible to perceive the very dilemma of all therapeutic interpersonal relationships. A parent comes seeming to want to be told what to do with the child who is a problem. If the resident does not tell the parent, and evades the demand, he is considered as not caring about the parental problem, and becomes a symbol of withholding; if he does try to tell the parent what to do, he threatens the parental autonomy, and the parent must react defensively to such dominating attempts. The situation demands of the resident that, whether the parent seems helpless or belligerent, he must identify with the capacity of parents to take some constructive organizing step in relation to the child's problem. If he does not get too caught in what the parent cannot do, he finds he can afford the parent a basic organizing experience; that of taking a constructive step from a setting of deadlocked ambivalence.

While it is true that as a group the parents served in the clinic are not generally incapacitated with neurotic anxiety, it is surprising how often fairly neurotic parents are helped quite definitely. The greatest factor in this is the actual dependency of the child; that is, it is frequently true that people can do for a child what they will not do for themselves.

The cases served by this clinic are extremely varied. The children's problems range from psychological retardation to extensive symptom formation. Significant parental attitudes range from indifference to marked concern.

The reaction of residents to types of problems varies with the individuals. Some residents are not too sensitive to their shortcomings, and will attempt to force parents to great changes, and not wish to refer complex and unmoving problems. Other residents feel utterly defeated by the imposed limits, and refer cases to the Child Guidance Clinic, whether the problem warrants referral or not.

It is of interest that residents who have never worked with much awareness of their own feelings become quite concerned when this factor is first pointed out. The anxiety that they have about their potentially harmful effects on the therapeutic interaction can be diminished only by successful experience. The experience in the administration of this program would indicate such anxiety is frequently a cause for seeking personal therapy. It may well be that the most valuable rôle supervision could take would be in assisting in making the distinction between anxiety arising from basic insecurity, and anxiety arising from lack of professional competence. If such a rôle were successful, it might better answer the current dilemma as to who should seek analysis, and when, since all may not have it. The impression exists that many who might use supervision for developing professional skill find their way early into analysis, while many who cannot use supervision do not get to analysis either, thereby creating a dilemma in psychiatry.

The limitations of the paper are such that the implications of such a training process can only be touched upon. In the course of such a brief experience, residents do not experience the full impact of a complete projection of dependency needs, such as re encountered, say, in the full transference of the psychotherapeutic interpersonal relationship. There is ample experience, however, in the original attitudes which people bring to parenthood, in relation to illness, and to the child's psychological development. The interrelationship between family vicissitudes and children's problems is fully demonstrated. In the 2 interviews, residents are placed in juxtaposition to most of the nuclear problems of psychotherapy.

In attempting to evaluate the merits of this program, without denying its weaknesses, it should be remembered that it is first of all practical. VA residents are offered an experience in relation to children's problems in a setting where the relationship to pediatric practice and to social agencies is clear. The intrinsic child psychiatric training program is not interfered with, and a real and necessary psychiatric service is given to parents and children. It should be noted that, while there have been many failures of service related to poor referral, lack of skill, and general unreadiness of the parents to use such service, it is equally true that there have been enough instances of excellent use of service to be gratifying to the residents.

Feeding problems, sleeping problems, developmental retardation associated with

chronic illness, speech problems, and problems related to excessive demand and lack of initiative—these have at one time or another been helped successfully in the clinic.

In reviewing the question as to whether the real needs of general psychiatry and psychiatric residents have been met by the program, some attempt has been made to check with the groups who have completed the rotation in the 2 years past. In retrospect, some psychiatrists are still frankly disappointed at the lack of direct experience in treating children. Some, too, still question the value of working with the parent when the child is the patient. A few questioned the service afforded parents, and felt no increase in their own skill. A number found the general experience stimulating and enriching, but found the supervision painful and inadequate insofar as the time afforded the individual resident. In the great majority, however, the value of the experience was affirmed, but the focus of value was not placed on the content of the experience, but upon the basic supervision in the therapeutic interpersonal relationship. For many, this was a value that was only gradually affirmed in the course of subsequent experience in treating patients. Of the residents who have rotated through this service, several are continuing training in child psychiatry, and others are applying for such training.

In the light of such reports, it does not seem possible to answer fully the question originally posed concerning the expressed need of general psychiatry. Psychiatric clinics for children have long noted the handicap to training programs resulting from lack of conception of individual supervision in general psychiatry. It would appear that the apparent success of this program, up to the present, lies in the fact that a basic training need in psychiatry is subserved, rather than an appreciation of the social interrelationship problem.

It would still appear that this kind of experience in the children's hospital setting would be valuable to demonstrate the interrelatedness of individual problem and the milieu of interpersonal relations. Perhaps it will be possible to answer the question when general psychiatry is more willing to experiment with the training relationship as an emotionally interacting one, as well as a didactic one.

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A POSTGRADUATE PSYCHOANALYTIC TRAINING PROGRAM[1]

Its Evolution, Principles, and Operation at the New York Medical College

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Mindful of the perplexing problems psychoanalytic education faces today, this paper is offered with the following aims in mind: first, to enlarge the fund of information about such education by describing our program; second, to unfold another phase in the development of psychoanalytic education; and, third, to add a bit to the story of the psychoanalytic movement—although the expanding role that psychoanalysis is playing in medical therapy can hardly be termed a "movement" any longer.

In one of his papers(1), Freud describes the difficulties he encountered within the group that gathered about him in 1902 to advance psychoanalysis. For some years this group was composed of nonmedical as well as medical people, but this seemed to be due to circumstances rather than Freud's own wishes. In 1910, therefore, at the Second Congress of Psychoanalysts, he proposed a reorganization of the psychoanalytic movement. Since medicine had "declared a boycott against medical men" practicing analysis, Freud believed that branch societies of an international association could train doctors "whose work would then have a kind of guarantee" upon psychoanalysis. In this way he indicated his early concern that medical men train and be trained in psychoanalysis, and his recognition that only they could guarantee its development.

Despite Freud's good intention, however, various "schools of thought" have formed within the field of psychoanalysis. That there should be differences of opinion is no great sin in itself. The fact, however, that such differences in belief within a branch of medicine should lead to repeated schisms and disaffections has been a fact difficult for the medical profession to comprehend. It has quite logically caused criticism of psychoanalysis as a medical science, and has naturally added to its difficulties. This has tended to inhibit the growth of psychoanalysis. Experience would seem to indicate that much of the difficulty psychoanalysis has had has not been due alone to its relative youth, but to the fact that its education has been conducted in private institutes rather than the accepted channels of medical education, namely, medical schools.

By 1920, the state of disorganization in its teaching program was sufficiently recognized to result in the formation of the first systematic course of training in psychoanalysis at the Berlin Psychoanalytic Institute(2). In 1931, a bare 18 years ago, the first American institute—the New York Psychoanalytic Institute—was started under the leadership of A. A. Brill. For the first time, one year of psychiatric experience in a hospital was made a requirement for admission. In 1938 the American Psychoanalytic Association adopted the Berlin-New York curriculum as its minimal standard of training.

One early member of the New York Psychoanalytic Society had long cherished the idea that some day psychoanalysis would be taught in an atmosphere free from doctrinaire attitudes that only a medical school could furnish. Accordingly, in 1941, Stephen P. Jewett, as director of the department of psychiatry, initiated the first *successful* program of graduate courses in psychoanalysis at the New York Medical College. In this brave and farsighted effort he was supported by Dean J. A. W. Hetrick, and ably assisted by Dr. Bernard Robbins and Dr. William Silverberg. Although the program began modestly, its success led the College to offer a comprehensive course in the fall of 1944. Because of the school's earlier program, several doctors, including myself, had the honor of completing this course in 1945. This was the first time that a group of doctors completed a course of training in psychoanalysis offered by a medical school.

[1] Read at the 105th annual meeting of The American Psychiatric Association, Montreal, Quebec, May 23-27, 1949.

The following are the 6 requirements for admission to the training program: (1) graduation from an approved medical school; (2) completion of an approved interneship of not less than 1 year; (3) completion of at least 1 year's work in a psychiatric hospital; (4) personal analysis; (5) approval of personality qualifications by the department of psychiatry; (6) approval by the College Admissions Committee.

The curriculum of our comprehensive course is basically that recommended by the American Psychoanalytic Association. It is divided into (1) personal analysis; (2) classroom instruction in theory and practice; and (3) supervised clinical work.

Students usually undertake analysis with members of the teaching staff but may do so with other analysts approved by the department. I think all of our staff would agree that our common aim is to help the student acquire a thorough knowledge of the origin and nature of his personality structure, and that he may thus gain a level of maturity commensurate with his age and potentialities; that quality of sensitivity that will enable him to successfully treat his patients; tolerance for new ideas in psychoanalysis that may further its development; and flexibility, or the ability to change. We tend to call these analyses "didactic," but really regard them as "therapeutic," and consider no analysis complete without the approval of the student's training analyst.

Theory and practice are taught week-day evenings, and the course may be completed in 3 years. In the first year, the following courses are given: (1) Readings in Psychoanalytic Literature, covering most of Freud's writings, and those of other prominent contributors; (2) Psychiatry and Psychoanalysis, an elementary clinical course in which case material is used to exemplify basic psychoanalytic concepts; (3) Introduction to Psychoanalysis, a lecture course that critically evaluates the basic concepts of psychoanalysis; (4) Seminar in Psychosomatic Medicine, a lecture and clinical course dealing with the psychogenesis of somatic symptoms; (5) Introduction to Psychoanalytic Technique, covering the elements of technique needed by students preparing to begin supervised work.

The second and third years are essentially clinical ones. A continuous case seminar runs through the 2 semesters of both these years. In this course, the same student presents material from a case he is treating, and the class uses it to understand psychodynamics and the problems of treatment. Two clinical conferences are also given in these years. At each class a different student presents material, which the class discusses to gain the ability of rapidly assessing the crucial problems involved in the treatment of any single case. A clinical seminar on dream interpretation, in which students present for class discussion the dreams of patients they are treating, is given in the second year. In this year, too, a lecture course titled "Clinical Psychopathology" is offered. An advanced course in Psychoanalytic Technique, which also deals with the goals of psychoanalysis and the principles of structural analysis, is given in the third year. Lastly, a lecture course titled "Special Theories of the Neuroses" is given in the third year. At present, this course describes a social approach to the theory of the origin of the neuroses, the nature of unconsciousness, and the process of cure in contrast to Freud's biological approach.

The third part of the program encompasses supervised clinical work in the form of weekly conferences between the student and a training analyst. The student gives a detailed report of his daily management of a patient for critical appraisal and guidance. He must complete such work with 2 analysts, and have 50 conferences with one, and 25 with the other.

Each instructor is afforded the privilege of teaching in accordance with his own clinical findings. There is a preponderance of "senior" members with extensive experience on the training staff, but also several "junior" members. The latter have been chosen because it is believed they have much to learn from, and something to contribute to, a training program. They have thus far come from the ranks of our own graduating students, since their early exposure to various points of view has developed an understanding and tolerance of them, and they are therefore better equipped to teach according to the spirit of the program, and to carry it forward in the future.

Whereas it is generally believed that the

only valid way to train a student is first to teach him classical psychoanalysis, we find that, if our fundamental principles of teaching are pursued, the student profits immeasurably. He will be able to learn not only what is "classic," but also that there are areas in which psychoanalysis needs development. He will come away with an appreciation of the fact that it is a young science, not a closed system.

While we believe that each training program has its own merit, we feel that our own has specific advantages. First, although each instructor has firmness of belief in his own ideas, dogmatism has no place in the program. Second, without the necessity to espouse a single doctrine, the course has flexibility, and can be geared to meet the needs of a total situation. Third, housed in a medical school, it is closer to others of the profession, and has ready access to the help of staff members in allied specialties and to clinical material for investigative purposes. Fourth, as members of the department of psychiatry, the analysts aid in its total teaching program with the special skills they possess. Fifth, since classes are held in the evening, our students may engage in remunerative practice, which enables them to pay for their education and to assume the obligations appropriate to their age.

Our program, of course, has not been without its problems. One of these was that of attracting students. The latter are naturally more drawn to traditional forms of education for reasons of "safety" and prestige. Thus far, however, we have had no mean success, and that is why I discuss this problem as in the past tense. A second problem, rather inevitable at the present stage of psychoanalytic history, is that of gaining recognition from colleagues and established forms of authority who look askance at such a departure from tradition. However, it is to be hoped that time and experience will result in a more common ground of understanding.

Another problem is of an administrative nature, and should always be temporary. Those members of the program originally accustomed to a private institute must acclimate themselves to the administrative machinery of the medical school, and the latter must learn the somewhat special needs of its new undertaking. Patient planning yields results in the form of an expanded teaching program that serves the needs of both.

Although we call our enrollees "students," we recognize them as scientific, thinking individuals, and our aim is to present the facts and theories as we see them. Our faith, I think, is in the ability of these doctors to form as unbiased opinions as possible on the basis of these teachings and their own clinical experience. Our hope is that after completion of the course they will continue to grow medically, and maintain a flexibility of opinion in accordance with their mounting clinical findings.

The theory and practice of psychoanalysis has a developmental history, and a logical part of it is this new trend in psychoanalytic education. It is inevitable that changes in psychoanalytic ideas be accompanied by changes in educational forms and methods. This new trend has really evolved from reasonable necessities, not merely internecine difficulties. The development of psychosomatic medicine, and the establishment of psychiatric clinics in hospitals associated with medical schools, have also made this course of events inescapable. The psychoanalyst, exercising his therapeutic skills in these medical centres, must necessarily establish and foster all of his educational facilities within them. The growing recognition by the medical profession that patients have emotional problems that aggravate organic disease, and that there really are functional diseases as such, has also promoted the new trend. In order to feel complete today, the staff of a medical school and its associated hospitals requires such a focus of education within its walls.

Such educational programs assure the *medical* validity of psychoanalysis. Their widespread adoption by medical schools—and only this, I believe—will automatically demarcate the qualified therapist from the unqualified practitioner, and afford a legal yardstick of therapeutic ability and responsibility. There will then be no more question in our minds about who is to practice psychoanalysis than there now is about who is to practice any other specialty of medicine.

When medical schools excluded education in psychoanalysis from their curricula, there was an urgent need for unaffiliated training

programs. Now, however, there would seem to be ever-diminishing reason for maintaining the contradiction inherent in the recognition of psychoanalysis as a medical specialty and the training of its practitioners in places distinct from medical institutions. In no other medical specialty does such a condition exist. Its continuation creates a responsibility for the medical profession that can no longer be shifted to the shoulders of any single part of it.

Freud was right in saying that the development of psychoanalysis would be guaranteed by the training of doctors. Its advance as a therapeutic weapon, too, can be attributed only to the training of increasing numbers of medical men. However, while the development of psychoanalysis, *per se*, has been thus far guaranteed, it will take other steps to promote its unquestioned acceptance as a form of medical therapy, and to develop it further as a therapeutic procedure. One of these steps would definitely seem to be the establishment of more such psychoanalytic training programs in medical schools.

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DISCUSSION

FRANZ ALEXANDER, M. D. (Chicago, Ill.).—As in all social phenomena, also in the development of psychoanalytic training one can well demonstrate the principle of cultural lag. This principle maintains that institutions develop according to prevailing conditions, are perpetuated by tradition, and tend to lag behind changing conditions. Psychoanalytic training of necessity had to develop in isolation from the rest of medical training. In 1920 when the first psychoanalytic institute was founded in Berlin, the medical profession, including psychiatry, had no use for psychoanalysis. Its rejection was complete. I was the first student to register in the Berlin Institute and therefore was an eyewitness to the cultural and ideological conditions that determined the organization and the spirit of psychoanalytic training in those days. The next student was Dr. Zutt from Bonhoeffer's clinic. We were both analyzed by Sachs and both were working with Bonhoeffer. Sachs often expressed his admiration for Zutt, who was and remained a man of great scientific ability. Zutt chose a university career and gave up his psychoanalytic training. In those days the two were not very compatible. I chose the other course, and soon after my analysis had started I gave up my work in the University clinic and went into professional exile as a student of the Institute.

Today, 20 years later, conditions have changed. There are scarcely any among the young students of psychiatry who consider psychoanalytic knowledge dispensable. Psychoanalysis conceptually has become an integral part of psychiatry and medicine as a whole.

In spite of all this, administratively the traditional separation of psychoanalytic training from the rest of psychiatric training still exists to a large degree. There are signs, however, that the trend of development is toward integration of psychoanalytic training within medical and psychiatric training. The New York Medical College described by Gralnick is a good example of the gradual liquidation of the cultural lag in the field of psychoanalytic training. A year ago, in Chicago, the Associated Psychiatric Faculties, Inc., was founded. Members of the Association are the psychiatric departments of the University of Chicago, the University of Illinois, Michael Reese Hospital, and the Chicago Psychoanalytic Institute. Its aim is the coordination of the general psychiatric and psychoanalytic training of the residents in these institutions. Their training is a joint responsibility of the Associated Psychiatric Faculties.

It is not difficult to predict that no matter how definite the trend is and how certain the outcome, we have still to count with a coming period of transition in which both the medical schools and the Psychoanalytic Association will resist the smooth assimilation of psychoanalytic training within the rest of psychiatric and medical training. Medical schools will still have to contend with the difficulty to incorporate psychoanalysis, which in many aspects is so different from the other medical disciplines; and psychoanalysts for a while will still struggle to preserve their tradition and keep psychoanalysis as a profession distinct from psychiatry in general, a profession taught in separate institutions and certified by special examination boards. The resistance of the medical school justifies the isolationism of psychoanalysts and vice versa; the isolationism of the psychoanalysts vindicates the resistance of the medical schools. Farsighted progressive leaders in both fields will have to overcome the respective resistances in their own camps and thus facilitate the full assimilation of psychoanalytic training within medical training.

Only one more word about Dr. Gralnick's emphasis upon the lack of doctrinary uniformity in their training school. Dogmatic insistence upon uniformity in teaching is itself a product of isolationism, of the state of affairs in which a small group of scientists have to defend their ideas against the criticism and bias of the rest of the world. With the relaxation of uncritical rejection, the defenders of new ideas can also afford to give a uniform front, become more self-critical, and tolerate differences of opinion among themselves without which no development in the field of science is possible.

WHO GOES TO A PSYCHIATRIST? [1]

A Report on 100 Unselected, Consecutive Cases

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What kind of people go to psychiatrists? Who are they and why do they go?

These are questions that are asked frequently, both by the public and by other physicians. In order to formulate a broad answer to these questions, we have assembled some significant statistics and observations. Our material is 100 unselected, consecutive patients who came to the office of three psychiatrists in private practice.

What kind of people go to the psychiatrist? In general terms, they are people from all walks of life, ranging from highly specialized professional men and women to unskilled laborers. They represent a veritable cross-section of American life, with no special peculiarities or external traits to distinguish them from the man in the street.

Financially, our patients were for the most part of very moderate means. Few had an income of more than $10,000 a year and the great majority were from families whose earnings were less than $5,000 a year. This would tend to refute the prevalent popular idea that only rich old ladies with nothing else to do go to psychiatrists—and then only because it is "fashionable."

This mistaken notion is probably due in great part to the dramatizing and glamorizing—in the movies, in fiction, and on the radio—of certain specialized psychiatric techniques, such as psychoanalysis, narcosynthesis, hypnoanalysis, and so forth. What we are discussing now is *general* psychiatry, the eclectic procedure which still, in spite of all the selective specialists, is the method of choice in treating 90% of all psychiatric disabilities. As a group, our patients were no more eccentric than those who would visit the office of any M.D.

In our series of 100 consecutive cases, 12 were professional people, 8 were unskilled laborers, and the remaining 80 were fairly evenly distributed among the intermediary echelons of social and financial status. Housewives comprised the largest single group, accounting for 23% of the total. There were 1 salesman, 4 businessmen, 8 students, 17 skilled laborers, 18 office workers and 9 unemployed. Thus all occupational groups were represented, pretty much without regard to their type of work. We believe that the relatively small number of unskilled laborers is probably due to their lack of awareness of psychiatry and its functions, to their financial limitations, and to the healthy pursuit of active physical work.

The fact that more housewives were seen than any other single group is in keeping with the general occupational picture among women, and does not in any way imply that the so-called weaker sex is more liable to psychiatric disorders. Actually, 54% of our patients were men and if, of the remaining 46% who were women, exactly half were housewives, that certainly corresponds very closely to the over-all situation. Again, there seems very little reason to place any credence in the popular idea that women who do not work outside the home are prone to develop more or less imaginary ailments, simply because they have too much time on their hands.

This line of thought may be followed one step further by pointing out that our men patients showed no evidence of being of a particularly weak or effeminate nature. At one extreme, we saw a homosexual and at the other a professional boxer, with a variety of fairly average masculine types in between.

Why do these people go to a psychiatrist? To generalize again, their troubles all stemmed, directly or indirectly, consciously or unconsciously, from their family

[1] Read in the Section on Private Practice of Psychiatry at the 105th annual meeting of The American Psychiatric Association, Montreal, Quebec, May 23-27, 1949.

From the Psychiatric Center, N. K. Rickles, M. D., Director.

backgrounds and from maladjustment in childhood. But this is such a well-known psychiatric fact that it need not be enlarged upon here.

By far the most common complaint—and by that we mean the first statement made by the patient when asked why he came—was "I'm nervous." When asked to describe this nervousness, the patients gave a variety of complaints too numerous and diverse to relate. However, the most usual symptoms were a feeling of internal tension, a feeling of depression, and a feeling of vague unreality—in that order. There were also several who feared that they were "going crazy" and some who feared not only that they would become insane but that they would lose control of themselves and harm others. Surprisingly enough, only 4 came primarily because of marital difficulties, although this factor later came to light during treatment in the majority of married patients.

Behind the general facade of "nervousness" lay, in almost every case, a feeling of basic insecurity and of uneasiness in relation to the environment. These feelings were expressed by self-consciousness and by sensations of not "belonging," of not being a part of any accepted group. The patients all manifested a certain amount of discontent and frustration. They described feelings of futility because of not being able to attain their ideals, fulfill their ambitions, or get ahead in their work. In some cases, the frustration was increased by situational factors such as economic difficulties, poor housing, social discrimination, and too heavy burdens of responsibility. The universal effect was a tendency to withdraw from reality, to become depressed and suspicious of other people.

Underlying all of this was a good deal of shame and confusion about sex. The women patients showed the effects of the all-too-prevalent attitude in our culture that sexual enjoyment is for men only and that the woman's rôle is merely passive resignation, from a sense of "duty" or for the sake of offspring. Their prudery and negation of all sexual pleasure was at times appalling. The men, on the other hand, showed evidences of extreme guilt for their sexual activities.

Both men and women were inclined to reproach themselves for neglecting their families, particularly their mothers. This is an unfortunate commentary on our matriarchal society with its exaggerated cult of the female, especially the over-glorified mother. "Momism," the term coined by Philip Wylie and now widely used by other writers, including Edward Strecker, to describe the excessive emotional demands made by some mothers, has become a part of our language, and blame has been heaped on "Mom" from all quarters. It sometimes seems that mothers are being made the scapegoats for all our social ills and that this is reaching the point of injustice or of a too easy alibi for the rest of us. The fact remains, however, that American children, and boys in particular, are often brought up with a false reverence of the female which colors and distorts their sexual attitudes for the rest of their lives.

In contrast to sex, religion seemed to be a comparatively minor problem to our patients. Where religious scruples were operative, it was usually in connection with masturbation or the practice of birth control. However, the theory that accepting psychiatric care is incompatible with church membership was disproved by the fact that all but two in our series belonged to one of the three major religious groups: 80% were Protestant, 11% were Jewish, and 7% were Catholic. The majority attended church irregularly or on special occasions only, although a few were exceedingly devout and pious.

The source of referral of our patients was available in 84 of the cases. The rest had been led to us by untraceable hearsay or had apparently wandered into the office at random. A breakdown revealed that 33 had been recommended to us by other patients who were friends or relatives of theirs; 24 had been referred by their physicians; 12 had picked our names out of the office directory, and 10 out of the telephone book. One was referred by an attorney, one by a minister, one by a social welfare worker, one by the Veterans Administration, and one by a newspaper.

The age variation in our series was from 9 to 79 years, with the following distribution: 1 was less than 10 years old; 6 were in their teens; 34 in their twenties; 27 in their thirties; 17 in their forties; 6 in their fifties; and 9 were more than 60 years old.

Here again we see a patient distribution that corresponds pretty closely to the distribution of age groups in the population as a whole. The only atypical feature was the relatively small number of teen-agers. We feel that this is probably because emotional difficulties seldom manifest themselves acutely in this age bracket, even though they may exist. Generally speaking, youngsters are so absorbed in the business of growing up and in the astonishing experiences of puberty, nascent sexuality, and learning to know the world around them, that they have no time to dwell on inner problems. These usually do not seriously affect young people until, with the approach of the early twenties, they are required to discard their fine, carefree irresponsibility and become self-sufficient, self-supporting, and mature.

In our opinion, it is precisely during the teen-age period, when emotional difficulties are latent, that psychiatry could and should do its best preventive work. Ideally, this might be accomplished by high-school courses in mental hygiene which would be as important and essential a part of the curriculum as physical education. Young people should be oriented for their future lives by lectures which would adequately prepare them for marriage, for the choice of a career, and for harmonious relationships with their fellows. If this were done, far fewer would have to seek psychiatric assistance in later years.

A tabulation of the marital status of our patients showed that 46 were married; 36 were single; 10 were divorced, or had been divorced, and 6 of this group had remarried; 8 were widowed.

In the over-all group, 46 of those who were married, divorced, or widowed had had children, the size of the families ranging from 1 child to 5, with an average of approximately 2.

A great majority of the married patients were having marital difficulties in varying degrees of intensity. In some cases, resentment over family responsibilities and restriction of personal liberty was expressed by somatic displacements, tacit withdrawal, extramarital relationships, or a mild addiction to alcohol.

Among the somatic displacements, the most frequent were headaches, dizziness, and discomfort of the precordium. In the absence of organic pathology, they usually yielded to psychotherapy.

It is important to note that only 4 of our 100 patients were genuine alcoholics, although the general public tends to believe that alcohol is a prime cause of human misery. The remainder were evenly divided between those who used alcohol moderately and those who did not drink at all. Two of the patients were habituated to barbiturates.

As for nicotine addiction, 50 were smokers and 50 were not. In the first group, 4 used pipes and the rest smoked cigarettes in quantities varying from 2 cigarettes to 1½ packs a day.

We found no other significant nervous habits and, with the exception of those patients who were very depressed and cried easily, there would be no way of distinguishing this group of people from any other group of 100 theoretically normal citizens.

As already stated, their financial standing was for the most part quite modest. It is impossible to draw a statistical parallel between the average income and the average cost of psychiatric treatment because several of our cases had the financial backing of families or savings, while others paid for treatment through veterans' benefits or insurance. In almost every case, however, there was some financial sacrifice involved, and we may therefore conclude that those who continued treatment felt a dire need for help.

One of the interesting results of our survey was to show that psychiatry today is definitely not a rich man's privilege—nor is it a poor man's dole. In the public mind, it seems that psychiatric care is usually classified either as a luxury for plutocrats or as a hand-out for paupers. But we found that all our cases who continued therapy were able to pay their way, despite their modest circumstances, and that their mental illness was no more of a financial strain than a physical illness, such as a kidney, heart, or gastrointestinal disorder. The average expenditure for psychiatric care in the office was $240 per person, figured on an annual basis. This is consistent with the average expense of any sickness in the other medical specialties.

In cases where hospitalization was necessary, the average length of stay was 29 days, at a total cost of about $400. We believe that this compares favorably with existing rates in general hospitals and that it is no more expensive to be taken to a hospital with an acute psychotic episode for treatment by electroshock or insulin than it is to go to a hospital with pneumonia, coronary thrombosis, or for an appendectomy. Furthermore, we believe that the expense is fully as justified and the results just as favorable.

These points need continued emphasis. It is surprising to find still, even among professional people, that the usual reaction to a case of mental illness is: "Send him to a state hospital!"—and this occurs in families where it would be unthinkable to apply to public facilities for treatment of a physical disease. This is partly due to the poor prognosis formerly given to any mental disorder and the consequent hangover of popular belief that "mental" is synonymous with "chronic," "lengthy," even "incurable." The feeling even persists, left over from the Dark Ages, that it is shameful, something to hide. Now, it is important that the public becomes aware that mental illness is treatable on a short-term basis, that it is more often curable than not, and that there is no stigma attached to it. In our experience, it was possible to convince the families of acute psychotic patients of these facts. After first expressing surprise and pleasure, they almost unanimously requested private care and agreed to be financially responsible for it.

In light of the progressive changes in the care of the mentally sick, it seems a sad commentary that they should still be stigmatized by being excluded from the various group medical insurance plans, especially those endorsed by county societies identified with the American Medical Association. If we, as medical men, really accept the fact that there is no dichotomy between the mind and the body, then we should also be ready to accept mental illness on the same financial basis as physical ailments. It is our contention that acute mental conditions should be considered in exactly the same manner as physical disorders and should be as acceptable for treatment and care by these various organizations. By helping to effect this change, medical men would once again truly prove themselves to be leaders instead of followers.

Medically speaking, what types of sickness are seen in a private psychiatric office? Of the 100 patients, 52 were diagnosed as psychoneurotic. These were then classified as follows: 30, anxiety state; 10, obsessive compulsive; 5, reactive depression; 3, hysterical reaction; 2, hypochondriacal reaction; and 2, psychosomatic.

Twenty-six were diagnosed as functionally psychotic and classified as: 17, schizophrenia; 4, manic-depressive psychosis; and 5, involutional depression.

The remaining 22 were undiagnosed except by symptoms: 4 alcoholics, 2 barbiturate users, 4 senile, 1 homosexual, 1 psychopath, 7 neurological, 1 definite case of hyperthyroidism; and 2 were seen because of criminal offenses that police authorities felt were sufficiently strange to warrant psychiatric observation.

Of the 100 patients, 14 were advised to go to a sanitarium for treatment. However, 4 of these decided to ignore the advice and did not go. Six patients received electroshock therapy on an office basis. A total of 16 received either electroshock or insulin or both. The remainder, amounting to 70%, were treated psychotherapeutically.

From these figures it may be seen that only a very few of the diagnosed schizophrenics received shock treatments and that the great majority were able to continue their lives outside hospitals. It has been a never-ending source of surprise and gratification to the authors that so many clinically diagnosed schizophrenics are capable with psychiatric support of carrying on, at least marginally, in our fast-moving, high-pressure society. We have followed these cases and similar others over a long period of time, and feel that we not only contributed to their mental and emotional stability but also helped them see through their conflicts and, in many instances, actually obtained full remissions. (We use the term "remission" instead of "cure" as a matter of extreme conservatism.) As a result of therapy, most of the patients were able not only to *behave* normally in relation to their environment but also to *feel* normal and to be a part of the environment. Some will undoubtedly undergo acute recurring phases that will require supportive

therapy, but the encouraging feature is that these people are able to be out in society, maintain contacts and, for the most part, contribute as well as receive.

Forty of the 100 patients came only for one visit. Of these, 12 did not return because they could not afford psychiatric treatment or were unable to leave their work during office hours. Eight made second appointments for which they did not appear. One felt that not he but his family needed treatment. One frankly preferred to continue drinking because he enjoyed it. One came for medicolegal advice only, and one was an acute severe paranoid who rushed in and out of the office, seeking not treatment but some way to break the spell that her minister had cast over her.

It is interesting to speculate on what motivated the other patients who appeared once and then never came back. Since we had no opportunity to question them, their reasons must obviously remain in the realm of conjecture. But enough is known from experience in psychiatric practice to assume with a fair degree of certainty that a considerable proportion were sensation seekers who went to a psychiatrist after their curiosity had been aroused by a movie, an article in the press, or a visiting lecturer. Such people are apt to have a completely distorted idea of psychiatry. They expect to enter the office, pay a fee, and then sit back while the doctor turns a miracle. They are deeply disillusioned when they find that psychotherapy requires long, hard work on the part of both doctor and patient and, being unwilling to contribute any effort themselves, they go off to look for a panacea elsewhere.

Another group of vanishing patients is undoubtedly composed of those who are afraid to face their own basic problems. With the realization that considerable probing is a necessary and usually painful part of psychiatric treatment, they decide to return to the safety of their neurotic defenses. Others, who could afford treatment, have as a very part of their sickness an extreme penuriousness that prevents them from being willing to pay for it. Still others have been pushed by well-meaning friends or relatives into consulting a psychiatrist and never really felt they needed it or intended to follow it up.

Where continued therapy was undertaken, psychological examinations were made only when the psychiatrist felt that they were necessary. The financial status of the patient was also taken into consideration, although only as a secondary factor. When performed, the examinations always included a Rorschach and a Wechsler-Bellevue and, depending on the indications, the T.A.T., the word association, and Goldstein-Sherer. The findings of the psychologicals largely confirmed the clinical observations.

All forms of therapy were used. We believe that it is not desirable to have any preconceived or rigid approach to the treatment phase. In other words, we do not believe that the patient should be made to conform to any established method of treatment or discipline, but rather that the patient should be the determining factor and that the psychiatrist should be sufficiently flexible and versatile to select the method of treatment according to the individual and his circumstances.

In many cases, only guidance and support are necessary. In others, help is required in adjusting situational factors, such as work, schooling, or a better understanding in the home. For the younger psychoneurotics, a long-term psychotherapeutic program is outlined and followed. The psychotics who are dangerous to themselves or others are treated in small rest homes or sanitariums, and shock treatment is instituted when indicated. The results of this open, eclectic approach have been very satisfactory to both the patients and the doctors. Of the 60 cases followed in therapy, practically all felt that they had received considerable help and encouragement, as well as enlightenment. They had matured emotionally and had an increased ability to meet life realistically, with added possibilities of attaining security and happiness.

Conclusion and Recommendations

This statistical review has emphasized the following points:

1. Into the office of the private practicing psychiatrist come people from all walks and situations of life. They are in practically all respects average American citizens, undistinguishable from any others. Their only common denominators are nervous symp-

toms or emotional problems which they cannot handle themselves and for which they seek professional help.

2. The majority are in extremely modest financial circumstances, but they are willing to make certain sacrifices in order to receive psychiatric care.

Since 12% of our 100 cases were obliged to forego therapy because they could not afford it or because they could not leave their jobs during working hours, it appears on the basis of this study that a prime requisite for the mental health of any community is the establishment of evening clinics for such people. They need and want treatment, they are willing to pay for it within the limits of their capabilities, and they are willing to give up their leisure time to obtain it. Surely, then, there should be facilities to meet their simple requirements.

Clinics should also be established for daytime care on a reduced fee basis, where young psychiatrists under the capable supervision of older men would be able to render valuable psychiatric aid to those who need it, while at the same time adding to their own fund of knowledge and experience. As further inducement for young psychiatrists to identify themselves with such clinic procedures, the American Board of Psychiatry and Neurology should give proper credit for this experience, as being an essential part of their training period.

In the realm of preventive psychiatry, we believe that the teen-age group offers a tremendous and fertile field for education, and that the precepts of mental hygiene should be inculcated in a wholesome way by making them an integral part of the accepted school curriculum. If adult problems, such as marriage and the choice of a career, are clarified for young people before they actually have to face them, many traumatic experiences would be avoided in later life.

In regard to the acute psychotics, we feel that modern psychiatric procedures have proved that they can be cured at about the same ratio as people suffering from acute physical disorders, and that proper facilities should be made available for their care. There should be more beds for acute psychiatric patients, both in general hospitals and in small, homelike sanitariums. Our experience has shown that large institutions have a tendency to defeat their purpose, as the individual loses his identity and suffers from the lack of security and warmth. With this in view, it is recommended that in the future, in planning for inpatient psychiatric care, both public and private facilities be established on a cottagelike basis. Whenever possible, these patients should be accepted in the various group medical insurance plans on a par with other medical disorders.

Finally, we wish to urge—in common with practically all our confreres—that a public education program be actively pursued in order that people be informed and kept abreast of the developments and improvements in psychiatric services.

THE SEMANTICS OF "ORGAN LANGUAGE"

A Comparative Study of English, French, and German [1]

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The term "organ language" was originally used to designate the fact that organs "express" emotional conflicts by dysfunction. However, it was also noted that in actual language, *i. e.*, in the word units of idiomatic expressions, the nouns for organs and the verbs for organ functions are frequently used to express complex emotional processes. When we say about someone that "we cannot stomach him," or when we ask a person to get something "off his chest," we use lexical and grammatical units which originated centuries ago but which seem to convey with surprising accuracy what has been confirmed by recent methods of psychoanalysis, physiology, and comparative clinical observation. There are a few scattered observations about this in the literature on psychosomatic medicine and psychoanalysis. Flanders Dunbar (1943) quotes a random list of German idiomatic expressions referring to gastrointestinal functions given by Heyer (1925). As is well known, Freud often referred to the etymology and metaphoric usage of words, obviously also because he regarded these observations as a valuable index of a prescientific awareness of psychological mechanisms. Sharpe (1940) made a study of psychophysical metaphors as used by patients during analysis.

In the following paper an attempt is made to study the semantics of "organ language" on a systematic comparative basis in English, German, and French.

METHOD

The three investigators, whose mother tongue is German, French, and English respectively, made lists of lexical units which have the connotations mentioned above, one separate list for each organ or body area. These lists were first made by each investigator independently, and later compared. In addition, handbooks dealing with semantics, metaphors, synonyms, and slang, and etymological handbooks were used (Weigand 1852, Bartlett 1882, Skeat 1882, Murray 1884, Richter 1902, Smith 1912, Weekly 1921, Seiler 1921, Hyamson 1922, Walde 1930, Bloomfield 1933, Berry 1942). Special works on Shakespeare (Bartlett 1882) and on the Bible [2] were included.

With certain word units it was difficult to decide whether or not to include them. It was attempted to confine this study only to those aspects of language pertaining to psychosomatic connections which are on a preconscious level. For example, if we use the expression that someone is "hitting his head against the wall," we are choosing the example of an overt mimic metaphor which has no further psychosomatic implications. However, if we use the word "stiff-necked" (hartnäckig) = stubborn, we are somewhat closer to the subject that is being investigated here; because in this lexical unit the meaning of "tenacity" is conveyed by something expressing muscular tension in a certain body area, and there are quite obvious clinical implications. It is quite clear, from the last-mentioned example, that the choice of word units had to be rather arbitrary in many cases.

RESULTS

Etymological Note.—Odi (Lat.) = to hate has the same root as odium = smell. "Stink" in English was originally an indifferent word, and became gradually, by a process of "semantic narrowing," "emotionalized" (Graff

[1] Read at the 105th annual meeting of The American Psychiatric Association, Montreal, Quebec, May 23-27, 1949.

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[2] The authors wish to thank Mr. Richard Pennington, chief librarian, Redpath Library, McGill University, for his valuable help; and Dr. M. Etziony for his observations on Hebrew metaphors as used in the Old Testament. Dr. Etziony's observations will be published in a special study.

1932). "Sentir" had originally the meaning of "smell" and came later to comprise all "feeling." To "snub" someone, "the snob," "snooty" are derived from the roots of sniff, snout, sneeze, and imply the expulsion of slime as an expression of hostility.[3] These expressions have at the same time an oral connotation as is seen in the German "Schnauze" (snout) = someone with an aggressive speech, "anschnauzen" = to speak rudely to someone.

Gêmbh—gmbh—"bite, bite to pieces," *gombhos* = tooth (Old Indian) possible root of "Kampf" fight (Walde, 1930). "Remorse" means "to bite once more." "Remordre" (Fr.) means "to bite again" as well as "to cause remorse." "To fret" has the same root as the German "fressen" (eat). "Nag," root as in "gnaw," German "nagen." "Groll" (German for "withheld anger") associated with the root of "to growl." "Grudge" is associated with the Old French *groucier* (etymological imitative of growling, comp. "to grumble").

In German the words for mouth (Mund, Maul, Gosche) assume various degrees of vulgarity and aggressiveness. These degrees are associated with connotations of destructiveness: "Mund" = mouth; "Maul" (Old German) *din mûla*, "malan" to grind up; "Gosche," associated with "gosier," "guttur," gozzo (the throat).

There is an Indo-Germanic root *Kred-dhe* = credo, I believe. It stems from same root as *Kered, Kerd, Krd, Kred, Cor, Cord* (heart).

The connection between "spirit" and "spirare" (breathe), "Atman" (Sanskrit) = "Spirit" and "Atem" (German) = breath, "ruâh" (Hebrew) synonym for "breath" and "spirit," are well known.

[3] The etymology of "snob" = "s. nob." = sine nobilitate is regarded as erroneous.

LIST OF IDIOMS

English	German	French
	Head	
He gives me a headache (he is a nuisance)	.....	.....
This is a headache (difficult problem or situation)	Es macht mir Kopfzerbrechen	Avoir, se mettre martel en tête
To be cracked (insane, abnormal)	Mir platzt, zerspringt der Kopf (being under high pressure by unsurmountable obstacle in one's work, by problems, etc.)	Avoir la tête fêlée
Hair-raising (fear)	Haarsträubend	Faire dresser les cheveux
Hair stands on end	Haar steht zu Berge	.....
.....	.....	Avoir un cheveu pour une femme (take a fancy to a woman)
To lose one's hair over something (to lose one's temper)	Haare verlieren (to worry over something)	.....
	Neck	
He is a pain in the neck	.....	.....
Stiffnecked	Hartnäckig	Avoir le cou raide
	Nose	
To make somebody's nose swell (to make somebody jealous)	.....	.....
.....	Die Nase voll haben (to have a full nose) = to have enough (negative sense)	.....

LIST OF IDIOMS—*Continued*

English	German	French
.....	Ich kann ihn nicht riechen (I cannot smell him) = I cannot stand him	Je ne puis le sentir Je l'ai dans le nez
.....	.....	Saigner du nez (to lack courage)
Hard-nosed (angry)	.....	.....
To take pepper in the nose (to be offended)	.....	.....
.....	.....	Vouloir manger le nez de quelqu'un (hatred)
It stinks	Es stinkt	Cela lui pue, cela lui pue au nez
This smells of	Das riecht nach	Cela pue de . . . .
	Oral	
To be scared spitless	Es ist mir die Spucke weggeblieben	.....
.....	.....	Baver sur quelqu'un (drooling on someone = to calumniate)
To be tongue-tied (not necessarily emotional)	.....	Avoir la langue liée (not necessarily emotion)
.....	.....	Cracher = to give Cracher sur quelqu'un = to despise
Tongue stuck to the roof of his mouth (nervous)	Die Zunge war mir gelähmt	.....
Sucker	.....	Gobeur
To be taken in	Er hat es gefressen (he has been deceived)	Ça ne mord pas (I am not to be taken in)
To lap it up	Es ist mir aalglatt eingegangen (it went inside with the smoothness of an eel)	Gober
I could eat her up	Zum fressen gern	Je la croquerais
.....	Ein gefundenes Fressen	.....
To show one's teeth	Die Zähne zeigen	Montrer les dents (les grosses dents)
In the teeth of	.....	Malgré les dents
To take the bit in one's teeth	Die Zähne zusammenbeissen	Prendre le mors aux dents (hostile)
.....	.....	Garder une dent contre quelqu'un
To set the teeth on edge	.....	Grincer des dents = to have a grudge
.....	.....	Mal de dents (passionate love)
.....	.....	Donner un coup de dents à quelqu'un
What's biting you?	.....	Quel chien vous a mordu?
To make a biting comment	bissige Bemerkung	Mordre quelqu'un (to hurt someone with words)

LIST OF IDIOMS—*Continued*

English	German	French
Remorse	Gewissensbiss	Se mordre la langue (to repent having said something) (bite of conscience)
To fret	es nagte an mir	Se ronger
To fret one's heart out	es frisst in mir	Se mordre les doigts (to repent having done something)
To fret one's guts	.....	.....
To bite one's hips (to regret)	.....	.....
To nag	.....	.....
	Throat	
The words stuck in my throat	Es blieb mir in der Kehle stecken	J'avais le gosier serré
It sticks in my throat	.....	.....
.....	.....	Etrangler de rage
	Swallow	
.....	"Armer Schlucker" (Poor sucker)	.....
I had to swallow a lot	Ich musste vieles schlucken	Il m'a fallu avaler bien des choses
To swallow an insult	Hinunterschlucken	Boire un affront
I can't swallow that	.....	Je ne puis avaler cela
Something is a "gagger"	.....	.....
.....	Es schnürte mir die Kehle (it throttled me)	.....
He swallowed it	Er schluckte es	Il l'avala
.....	.....	Avaler des couleuvres (snakes)
Swallow the pill	Die bittere Pille schlucken	Avaler la pilule
.....	mit den Augen verschlingen	Avaler quelqu'un des yeux (rage)
.....	.....	Avaler quelqu'un (to regard someone with anger)
.....	.....	Ravaler (to depreciate)
	Stomach, Intestines	
I cannot stomach it	Es ist unverdaulich, schwer zu verdauen (indigestible)	Je ne puis digérer ça
It turns my stomach	Es drehte mir den Magen um	Cela m'écoeure
It makes me sick, vomit	Es ist zum kotzen	Cela me fait lever le coeur, vomir
To be fed up	Es steht mir bis hierher (indicating level)	En avoir une indigestion
To be stomachy	.....	.....
.....	.....	S'estomaquer (to be angry)
It comes up to here	Es wächst mir zum Hals herans	Avoir jusqu'aux dents

LIST OF IDIOMS—*Continued*

ENGLISH	GERMAN	FRENCH
To have no stomach for something (*cf.* positive usage in Shakespeare)	.....	.....
.....	.....	Avoir de l'estomac (to have plenty of pluck, to have plenty of cheek)
It sticks in my stomach	Es liegt mir im Magen	.....
To belly ache (complain)	.....	.....
.....	.....	Estomaquer (to cause a marked and unpleasant surprise)
To have guts	.....	Avoir du coeur au ventre (to be brave)
.....	.....	Avoir quelque chose dans le ventre (to be capable of something)
To have plenty of guts but no bowels	.....	Etre sans entrailles (without soul)
To put one's guts into something	.....	.....
.....	.....	Remettre le coeur au ventre à quelqu'un (to give somebody courage)
To get something out of one's system	.....	.....
.....	"Es brennen mir die Eingeweide" (Goethe) = My intestines burn (longing)	.....
	Heart	
His heart in his mouth (fear)	.....	.....
.....	Das Herz in den Hosen (fear)	.....
Heart in his boots (depression)	.....	.....
It breaks my heart	Es bricht mir das Herz	Cela me brise le coeur
My heart is torn	Es zerreist mir das Herz	Mon coeur est déchiré
My heart stood still, stopped	Das Herz ist stillgestanden	.....
My heart is full	Das Herz ist voll	J'ai le coeur gros
Large-hearted	Grossherzig	Plein de coeur
Hard-hearted	Hartherzig	Au coeur dur
Soft-hearted	.....	.....
Cold-hearted	Ein kaltes Herz	Au coeur froid
Warm-hearted	Warmherzig	Au coeur chaud
Light-hearted	Leichtherzig	Au coeur léger
Heavy-hearted	Schweren Herzens	Au coeur gros
Heart-sick	Krank am Herzen	Le mort dans le coeur
The heart leaps	Das Herz hüpft	Le coeur me bat (worry)
To unburden the heart	Das Herz erleichtern	Décharger son coeur
To wring the heart	.....	Avoir le coeur dans un étau
The heart bleeds	Mir blutet das Herz	Le coeur me saigne

LIST OF IDIOMS—*Continued*

English	German	French
To keep something next one's heart (something very secret or very dear)	Auf dem Herzen haben	.....
To eat one's heart out	.....	Se ronger le coeur
	Lungs and Chest	
.....	Ich huste dir etwas (I cough you something) = expression of hostile refusal	.....
.....	Ich blase dir etwas (I blow you something) = expression of hostile refusal	.....
To be able to breathe again	Aufatmen	Respirer
To take one's breath away	Mir steht der Atem still	Couper la respiration
To get something off one's chest	.....	.....
To make a clean breast of it	.....	.....
The milk of human kindness	Die Milch der frommen Denkungsart	"nourri du lait sacré" (André Chénier), "sucer le lait des cours" (Mirabeau)
To keep it next to, under your heart	Im Busen verwahren	.....
.....	.....	J'ai le coeur qui m'étouffe
	Liver	
It galls me	Mir kommt die Galle hoch, Mir läuft die Galle über	.....
Green with jealousy	Gelb vor Neid	Vert d'envie
Yellow (cowardly)	.....	.....
.....	Eine Laus über die Leber gelaufen	.....
.....	Etwas über die Leber laufen	.....
Lily-livered	.....	.....
To make the liver curl (to disgust)	.....	.....
In the liver vein (in love)	.....	.....
.....	.....	Le coeur lui devient foie (to lose courage)
.....	.....	Chaleurs de foie (surge of anger)
.....	.....	S'échauffer la bile (to worry)
.....	.....	Rire jaune; tout voir en jaune
	Spleen	
Splenetic (irritable)	.....	Décharger sa rate sur quelqu'un (to let one's anger loose)
.....	Er hat einen "Spleen" (He is "cracked")	.....

LIST OF IDIOMS—*Continued*

English	German	French
.....	.....	Se fouler la rate (to work hard)
.....	.....	Epanouir, dilater, désopiler la rate de quelqu'un (to make someone shake with laughter)
	Blood	
To do something in cold blood	Kaltblütig, Kühles Blut bewahren	Agir de sang-froid
To make the blood boil	.....	.....
Warm-blooded	.....	Avoir le sang chaud
.....	.....	Mon sang n'a fait qu'un tour (my heart lept into my mouth)
.....	.....	Se faire du mauvais sang; Se manger les sangs (to fret)
	Skin	
	In several German dialects "beissen" (to bite) can be used synonymously with "jucken" (to itch)	
To rub one the wrong way	.....	Prendre quelqu'un à rebrousse poil
To go against the grain	.....	.....
To get under someone's skin	.....	.....
To itch for something	Es juckt mich zu	Avoir une démangeaison de ....
To make the flesh creep	.....	Donner la chair de poule
.....	.....	Avoir dans la peau
Next of skin	.....	.....
	Limbs and Trunk	
To be scared stiff	Es ist mir in die Glieder gefahren	.....
To be struck all of a heap	.....	.....
To be spineless	Kein Rückgrat haben	.....
.....	.....	Il me scie le dos (he bores me stiff)
.....	.....	Etre sur le dos de quelqu'un (to nag at someoone)
.....	.....	En avoir plein le dos (to be fed up with)

Genito-urinary, Rectum

There are a large number of slang expressions, "obscenities," "vulgar" expressions, which are used in all languages. To list these would be beyond the scope of this paper. "Shit," "scheisse," "merde" are used in innumerable connections to express either hostility or disgust.

The verbs associated with defecation are also frequently used in connection with fright.

In the study of slang expressions it is noteworthy that there is quite frequently an interchanging of the various orifices, such as in "shit through one's teeth" (vomiting) or "the thankless mouth" (female genitalia).

It is also well known that in all languages expressions associated with parsimony have frequently anal connotations such as "filzig," "schäbig," = parsimonious in German. French "serré" is applied to a miser, *e. g.*, "un homme serré"; "un ventre

serré" (constipated). Other expressions such as "to drop somebody," "to cut somebody off," etc., can be interpreted on the basis of anal function only with theoretical preconceptions; such interpretations are rather uncertain and can be verified only in single cases on the basis of free thought association; they do not strictly belong to the subject investigated here.

DISCUSSION

In looking through the preceding list of expressions we can easily distinguish several ways in which the nouns or verbs for organs and their functions are employed. Firstly, there are expressions which imply a conscious awareness of the autonomic concomitants of emotional reactions (*e. g.*, "to be scared spitless," "it makes my flesh creep"). Secondly, there are expressions in which the word for an organ is employed as a substitute for an emotional attitude ("soft-hearted," "to have guts"). Some of these expressions have a shade of concrete physiological meaning, *e. g.*, "spineless," "no backbone," implying a lack of muscular tone associated with lack of initiative. Thirdly, another group of expressions has implications which have been proved accurate only with recent psychoanalytic methods of investigation ("I cannot stomach him," "I have to swallow it," "to fret," etc.) Fourth, there is another group of expressions which indicate a long-standing awareness of psychosomatic relationships, the reality of which has now been proved scientifically ("he gives me a headache"). Finally, there are expressions the scientific connotations of which are still uncertain, *e. g.*, "splenetic" (irritable). Some of these, for instance, "ich habe die Nase voll" may well be scientifically correct because it is quite likely that there is a strong psychogenic component to many cases of chronic sinusitis but this is not yet proved.

Moreover, there are certain trends discernible in which different body areas are semantically employed. Thus, grammatical units referring to oral (and nasal) mechanisms are related to the antithesis of love-hatred, numerically much more to hatred. Expressions referring to heart and chest convey mechanisms of affective reactions to experiences or permanent affective traits. Expressions referring to head, neck, and limbs express tensional reactions between individual and environment, and have the connotation of "conversion."

Some word units referring to hostility have an etymology associated with oral activities; furthermore, in the metaphors used the oral activity is not necessarily implied. On the other hand, we were not able to find any *etymological* roots which would demonstrate a connection between anal functions and expression of hostility; furthermore, all expressions in which anal functions are implied appear to be slang expressions in which the "vulgar" word is intentionally and consciously used to express hostility. This difference is difficult to explain unless we assume that the connection between environmental relationship and oral mechanisms is more deeply rooted and phylogenetically older, and that "anal" metaphors become hostile only because certain social taboos and restrictions are placed on anal function.

Furthermore, it is remarkable that there are such close parallels between the three languages studied. The grammatical units in which, for example, such words as "to swallow," "heart," "stomach" are used are either similar or identical. There is a certain amount of scattering, for example, "the pain in the neck" exists only in English, "the full nose" only in German, but in most cases the trend is analogous. Apart from the fact that there is a certain amount of common origin of metaphoric usages from the Bible, and there may have been some mutual interaction, we must assume that the formation of these semantic units is governed by some intrinsic law which is the same in all languages. Most linguists agree that all languages in the world follow the same law of development (Meillet 1926, Sapir 1932). One of these trends is the "increase of abstraction" (Bonfante 1946). Thus, we see in the present semantic and etymological material a prescientific anatomy in which the names of organs and the verbs of organ functions have affective-symbolic values which they lost with the advent of scientific anatomy. This is only one aspect of a cultural development which is reflected also in other aspects of science, *e. g.*, mineralogy or botany (Bonfante 1946). Here, however, we encounter the strange phenomenon that

present-day scientific methods confirm the archaic symbolisms of semantic units. Thus, just as the study of the individual patient's language supplies valuable clues for "psychophysical problems" (Sharpe 1940), linguistic studies promise valid contributions to a knowledge of "organ language" and to deeply rooted social-psychological phenomena.

SUMMARY

A comparative linguistic study of English, French, and German was made. The purpose was to investigate the mode in which the nouns for organs and the verbs for organ functions are employed in grammatical units with emotional connotation. It was found that these grammatical units can be grouped in the following way:

(1) Expressions implying a conscious awareness of the autonomic concomitants of emotional reactions.

(2) Expressions in which the noun for an organ is employed as a substitute for an emotional attitude.

(3) Idiomatic patterns with implications which have been proved accurate only with recent psychoanalytical methods of investigation.

(4) Expressions which indicate a long-standing awareness of psychosomatic relationships, the reality of which has recently been proved.

(5) Expressions whose scientific connotations are still uncertain.

Different body areas are semantically employed along definite trends. Grammatical units referring to oral and nasal mechanisms are related to the antithesis of love-hatred, numerically much more to hatred. Some words expressing hostility have an etymology associated with oral organs and oral functions. We were unable to find etymological roots which would demonstrate a connection between anal functions and expressions of hostility. Expressions in which anal functions are implied are used intentionally and consciously in "vulgar" slang words to express hostility.

There is a striking parallel between the three languages. The meaning of these findings from the point of view of social and genetic psychology is discussed.

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THE ROLE OF THE PSYCHIATRIST AS CONSULTANT[1]

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Since the end of World War II it has become increasingly evident that the majority of medical men are widening their psychiatric orientation. There are many indications of this increased psychiatric awareness. The lay public has become more familiar with evidence of neuroses, psychosomatic diseases, and psychoses by way of the public press and radio. This emphasis has placed an almost impossible demand on the presently limited psychiatric field, and there has been a great clamor in both the public and medical press for more trained psychiatrists. Since the number of trained men in this skilled field falls far short of the supposed potential of the market, other ways of supplying the need must be explored. Some exploratory work has been done in the field of the general practitioner, for instance, the Minnesota experiment of the Commonwealth Fund in 1946(1). Other efforts of varying degrees of intensity have been carried out in different parts of the country. Psychiatry has received more emphasis in the general medical curriculum, and the psychosomatic orientation has been brought to the fore. However, it would seem that this very awareness of the interplay of physiological and psychological factors of disease has increased the anxiety of some of the medical people because they realize their lack of full training in the field and question their ability to handle psychotherapy. It is here that the psychiatrist can perform his most valuable service as consultant to the general practitioner and general medical specialist.

On the whole there has never been much difficulty in the relationships between the general medical practitioner and consultants in the medical and surgical specialties. The competent graduate of a medical school and internship has had enough contact with the ailments that fall in these specialized categories that he does not feel completely at sea when meeting them, and usually feels fairly at ease in conducting their treatment. It is only when he runs into a particularly perplexing question of diagnosis or when he feels more highly specialized treatment is indicated that he makes a referral. Even a decade ago, with the specialist in psychiatry, the general practitioner felt that he could only make a referral for consultation as a last-ditch resort, or perhaps as an intermediary step to hospitalization. It has been partly this fear of stigmatizing his patient that kept such consultations at a minimum. There is also the fact that, aside from some lectures and clinics in medical school, the man in the general field of medicine had little real contact with this specialty. Add to this the general feeling that psychiatric knowledge and particularly psychotherapy belonged to the esoteric alone. As a result consultations were requested only when there was question of a psychosis or a profound neurosis. The general practitioner handling cases of ulcer or colitis very often remained ignorant of the emotional concomitants or, because he felt helpless in the face of them, blinded himself to their significance. Even in this day, when the neuroses are recognized, or when the physician does become aware of the emotional factors of psychosomatic ailments, he is often unable to decide on a course of therapy. Thus when he requests a psychiatric consultation he is not able to decide whether he wants to carry on the treatment himself or to have the psychiatrist do it.

Once the request for consultation has been made, the psychiatrist is in the position to offer considerable help. In the first place he of course evaluates the case for himself and in doing so decides whether or not this is one which requires highly specialized techniques in therapy. If so, he will write the usual history and mental status, *and* as the front page of his report to the referring physician he will give a dynamic formulation of his impression. In this impression there should be incorporated a statement as to why he feels specialized techniques are called for in this case. Such a report will

[1] Read in the Section on Private Practice of Psychiatry at the 105th annual meeting of The American Psychiatric Association, Montreal, Quebec, May 23-27, 1949.

be of distinct value to the referring physician in broadening his psychiatric horizons, making him aware of future cases which may be amenable to intensive psychotherapy, and how best he may handle these cases for psychiatric referral. It will also bring into focus the limitations of his own setup in handling the more severe emotional difficulties.

If, on the other hand, the patient presents problems that can be dealt with more or less easily, the psychiatrist should help the referring physician to make the decision to continue the therapy himself. This is accomplished in much the same manner, the report containing a full formal history and mental status, plus the front page impression. In this instance the psychodynamics of the illness should be outlined in greater detail but with a continued respect for the use of simple, straightforward terminology. The points in the history that the physician has previously known should be emphasized in such a way that he will be aware of their new value in the psychodynamic constellation. Knowing that he has elicited this information from the patient previous to the consultation, the physician will have greater respect for his own fund of knowledge and his anxiety at the prospect of attempting therapy will be lessened.

As to the next step, a plan of psychotherapy should be outlined based upon the earlier psychodynamic formulation. The particular techniques that the psychiatrist has found helpful in his own experience with the type of case presented should also be suggested. One might hint at the general attitude the physician could assume in his future relationships with the patient predicated on the patient's characteristic attitudes toward authority. On the whole, the general tone of this portion of the report should be that the referring physician has at least a passing acquaintance with the general theory of psychosomatics.

The consultant should make every effort to meet and talk with the referring physician once the suggestion is made that the patient return to his own physician for therapy. This usually is comparatively simple when one is carrying on his work in either a clinic or general hospital, but it frequently requires a considerable amount of diplomacy if one is doing an extramural private practice. It also involves the question of the psychiatrist giving up some of his own time. However, it is in this tête-á-tête that a lasting rapport can be established with the other physician and one usually finds that especially the younger practitioner is anxious to discuss the patient and to seek help in carrying on treatment. The general practitioner often protests that he knows nothing of the techniques of psychotherapy and is pleased to learn that the physician-patient relationship, which he has already established, is in itself one of the basic techniques. During this discussion one can highlight the general principles of therapy, particularly as they relate to the patient in question. The psychiatrist will do well especially to emphasize the establishment of the emotional rapport of the doctor with the patient, and also the effort required in making the patient increasingly aware of his tensions or emotional conflicts and their relation to his somatic complaints. The point should be made that the psychiatric history taking in itself is the beginning of therapy and that the consultant has already made a start in bringing to the patient's awareness the relationship between his tensions and complaints. In the first two or three cases in which it is suggested that the general physician continue treatment, the consultant might well offer his further assistance in future discussions to supervise that treatment. Occasionally it becomes necessary for the psychiatrist to have one or two further contacts with the patient. These can be utilized to sum up the work that has already been accomplished with the patient's own physician, and perhaps to deal with a particular problem or to furnish fresh stimulus if needed.

Another consultative relationship that has proven to be of considerable value in the last few years is that between the psychiatrist and the internist or other medical specialist. In this instance the patient is referred to the psychiatrist for an evaluation of the potentialities of intensive psychotherapy. If this is decided upon, then psychotherapy is carried on concurrently with the physiological therapy. When there is a good professional relationship and easy interchange of information concerning the patient between the two therapists there is a considerable benefit to the patient. Often this relationship has been marred by the psychiatrists'

overzealous efforts to highlight the emotional aspects of the illness, with the consequence that the internist is made to feel that his physiological approach is being entirely discounted. It might be well here to point out that referrals in the other direction are also necessary. The psychiatrist who requests medical or surgical consultations and treatment for those patients in whom it is indicated develops a greater willingness among his colleagues for cooperative psychosomatic therapy. A further field is opening in requests from industrial surgeons and industrial psychologists for consultations and intensive psychotherapy in the cases of the accident-prone individuals.

The psychiatric consultation in the case of psychotics must not be overlooked, and it is felt that they can be handled in a more advantageous manner than past performance has indicated. When a general physician requests a consultation in a case that he believes to be psychotic he has many reasons for doing so. In the first place he usually approaches the problem with much the same attitude in which he approaches an acute surgical condition—that this is something with which the expert must deal. Secondly, he does not always wish to assume the onus of signing a commitment paper on a member of a family with which he has had associations over a period of years. And, of course, for the most obvious reason that he may not be sure whether this is a hysterical reaction to a situation, or an acute psychotic condition that requires hospitalization. The psychiatrist called in consultation here can be of value to the general physician if he remains in his rôle as a consultant and does not attempt to dominate the situation. He should have a full knowledge of suitable hospitals in his geographic area, both state and private, and should know what accommodations may be available. In his relations with the patient's family he can do much to allay their fears by carefully explaining in easily understandable terms what they may expect in regard to prognosis, general length of treatment, and the type of treatment available in the chosen hospital. He can do much to avoid future unpleasantness for the family and the patient by explaining the restrictions on visiting, the presence of locked doors, and other points which they may find disturbing in their first contact with a psychiatric hospital.

If the psychiatrist will take over the responsibility of signing the commitment, and explain the necessity for this procedure to the family, he can do much toward relieving the physician's anxiety when the latter is asked to sign the second commitment paper. This will do a great deal in helping the morale of the physician, as well as keeping his future relationships with the family and the patient on a firm basis.

As the general fund of psychiatric knowledge grows, more and more demands are being made upon the psychiatric consultant in nonmedical fields. It is taken as a matter of course that he will be the expert who is to address the PTA meetings, child study groups, mental hygiene societies, and all the various and sundry groups where the prevention of mental illness has become of interest. In addition he will be called upon to have consultations with, and to supervise, psychiatric social workers in welfare departments and general hospitals. Here he will have to call upon his knowledge of family relationships and cultural milieux. Probably his greatest problem in this situation will be to prevent the social worker from becoming too deeply involved with her client's emotional problems, and this will require a considerable amount of individual supervision as well as teaching and discussions with the whole group of social workers with whom he has become affiliated.

Consultative practice is not limited entirely to the medical field for the psychiatrist. He can be of great help in some of the social work fields where nonmedical personnel are in charge. For instance, in the field of marriage counselling he can help the minister or pastor of the church or consult with the lawyer or judge of the divorce court upon request. Of course, this in no way replaces the minister or the lawyer but is intended as a consultative service. The same thing applies in juvenile or criminal court cases. Frequently he can consult with the parole or probation officer and actually aid in therapy as well as in the diagnostic work.

A thoughtful psychiatrist will find many places in which he will be called for consultation where he can best serve by training the consulter who is in charge of the patient to

do the more superficial therapy. This has been greatly elaborated on in many other papers.

The foregoing discussion covers the major services that the psychiatrist will be called upon to perform if he is to enlarge his horizons beyond the diagnostic and intensive therapeutic fields. In doing so he helps to educate the lay and the medical public in the importance of the emotional factors in the study and treatment of illness. He helps to eliminate the prejudice of the general medical profession against admitting a formal psychiatric approach to medical patients. He also serves in the field of mental hygiene by his cooperation with social workers, the clergy, and the courts. And here again there is an important medium for the growth of preventive psychiatry. Equally important is the help and encouragement he gives to the general medical man in treating those patients whose emotional disturbances are not so great that they require highly specialized therapy. In this way he recognizes the need for a wider application of psychotherapy that has been created during the past decade, and helps to solve the problems brought about by the immediate lack of trained psychiatrists.

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CLINICAL NOTES

THE USE OF CERIUM OXALATE TO REDUCE INCIDENCE OF EMESIS IN DEEP INSULIN THERAPY

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One of the problems associated with deep insulin coma therapy is the occurrence of vomiting after the glucose tube feeding utilized to terminate the coma. This vomiting not only produces a messy, troublesome nursing task but constitutes a real threat to the patient as well. This threat presents itself in the possibility of bronchial aspiration of vomitus and as an increase in anxiety while the patient is helpless and trying to awaken from coma. In addition, the tube feeding may have to be repeated or hypertonic glucose administered intravenously to complete the treatment.

For the past 2 years the author has successfully handled this problem at Stony Lodge by utilization of cerium oxalate. Cerium is a rare metal, similar in many respects to aluminum. One of its salts, cerium oxalate, has a specific anesthetic and sedative effect on the gastric mucosa. Obstetricians and general practitioners frequently prescribed it for the treatment of nausea and vomiting of pregnancy at the turn of the century.

It has been our practice to administer one 3-grain capsule of cerium oxalate orally at the time of the insulin injection, 7 A. M. An additional similar dose is placed in the tube-feeding funnel at the end of the coma hour. Cerium oxalate is insoluble in the feeding formula as well as in alcohol or ether. There have been no toxic effects noted.

Constantly seeking refinements in technique, the author has found that the use of cerium oxalate in 3-grain doses can serve to reduce the incidence of the unpleasant nausea and vomiting so frequently associated with insulin therapy.

CORRESPONDENCE

THE PSYCHIATRIC FOUNDATION

Editor, AMERICAN JOURNAL OF PSYCHIATRY:

SIR: Comment in the January issue of the JOURNAL entitled "The Psychiatric Foundation?" referred to efforts now under way to consolidate the Psychiatric Foundation with the two other major national citizens' organizations in the field of mental health. The comment included statements that would seem to be misleading—no doubt inadvertently—and suggested that the members of The American Psychiatric Association should be fully advised as to the undertaking.

The Psychiatric Foundation was incorporated May 20, 1946, in New York State. Soon afterwards, Dr. Leo H. Bartemeier, its first president, stated, "The principal purpose for creating the Foundation is to establish an organization for acquiring funds with which to assist psychiatry to become more effective for the general good."

The Foundation was officially sponsored both by the American Psychiatric Association and by the American Neurological Association, but it was never intended that these organizations should control the Foundation. Approval by the two organizations was officially accepted at a meeting of the board of the Foundation, January 4, 1947. At the same meeting it was established that "neither of the two organizations has any legal relationship to the Foundation" and that "individuals serving in any capacity on the Foundation are not representing any organization, but are acting only as individuals."

A relationship with both the APA and ANA of reciprocal helpfulness, however, was contemplated from the outset and has been developed. The contributions of individual members of those associations, in response to initial appeals, helped the Foundation to make a good start. To date, APA and ANA members have contributed 13% of the total contributions made to the Psychiatric Foundation.

It has not proved feasible for the Foundation to undertake an all-out national fund-raising appeal . The money it has raised has so far been used exclusively to finance an important project of the American Psychiatric Association, the inspection and rating of mental hospitals. This program, conducted by a staff responsible to the Central Inspection Board of the APA, was designed to raise the standards of care in mental hospitals.

Yearly reports of the Psychiatric Foundation, since its organization, have been voluntarily submitted at the annual meetings of the American Psychiatric Association, including the session last year in Montreal. The last report pointed out that there was no intent on the part of the Foundation to duplicate the activities of other groups in the field, but it became evident that many groups and individuals, both lay and professional were confused by multiple appeals for programs that seemed to overlap. The report continued:

> It was soon realized that some sort of coordinated effort must be developed if a successful approach was to be made to the public for its understanding and financial support. Steps were therefore taken by three national organizations to develop unification of effort. These organizations were the National Committee for Mental Hygiene, the National Mental Health Foundation and the Psychiatric Foundation, and they appointed a Study and Planning Committee, consisting of two representatives from each organization, which began meeting in December, 1948.

The work of that Mental Health Study and Planning Committee was completed as scheduled, and the report it submitted was accepted in principle by the boards of the three organizations. Four members from each of these boards were elected to serve on the board of the proposed unified organization, to be known as the National Mental Health Association. Six additional board members were elected from outside the three organizations. This board has held several meetings and has progressed steadily toward

an agreement concerning a final proposal to the three organizations involved.

There is an overwhelming preponderance of informed opinion that the united organization will be able to develop a citizens' program commensurate with mental health needs, and will enlist full approval by professional organizations and wholehearted support by the public.

AUSTIN M. DAVIES,
Executive Director,
The Psychiatric Foundation.

DISODIUM FUMARATE IN SCHIZOPHRENIA

Editor, AMERICAN JOURNAL OF PSYCHIATRY:

SIR: That others may not have the need to conduct a certain unsuccessful experiment I wish to report briefly on the failure of disodium fumarate intravenously to exhibit chemotherapeutic value in schizophrenias.

Hammargren and Porje (Svenska Läkartidn., 37: 1893, 1940) reported spectacular but transient improvement in 3 of 13 acute psychotic reactions treated with fumarate intravenously. My own trials, carried out in a large hospital between 1944 and 1946, began with the hypothesis that a group of schizophrenias, perhaps equivalent to those showing a beneficial response to CO_2 inhalation, might be found to have a deficiency of C_4-dicarboxylic acids in the central nervous system, correctable by injection of fumarate. While no report was thought to be indicated at the time, current trends in biochemical research into the psychoses not only as regards the corticosteroids, but also, for instance, in the use of malono- and succino-dinitriles, and in the catalytic effect of the tricarboxylic acid cycle on lipoid metabolism, suggest that a report might now be indicated.

Forty-nine young male schizophrenics were given as many as 14 intravenous injections of from 1 to 5 grams of disodium fumarate. On one occasion the injection of 4 grams in 5% glucose was continued dropwise over a 2-hour period. Subjects selected for study for whom permission could not be obtained from the nearest relative were given sodium chloride, or glucose, as controls. Whenever possible batteries of psychological tests that could be completed within 20 minutes were administered prior to, and within one hour after, the injection. EEG tracings were run on 6 subjects before and after fumarate injection; these were subjected to Brazier analysis of the frequency spectrum. When a subject exhibited a response that seemed encouraging, he was later retested either by or in conjunction with another observer. Data suitable for numerical valuation were examined critically by a statistician. Our conclusion was that fumarate intravenously has no effect on the EEG, or on any measured manifestation of nervous function in the schizophrenias.

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COMMENT

ADOLF MEYER

For many years Adolf Meyer has been the preeminently representative figure in American psychiatry. His extraordinarily broad vision, reflected in the term psychobiology as he understood and used this term, gave a new orientation to this department of medicine; and through his teaching and that of his pupils his wholesome influence reached far beyond the borders of the United States. His tolerant attitude was at the same time conservative in demanding a firm foundation in observed facts for making a clinical evaluation, and his observation neglected no detail that could have a bearing on the clinical picture. Nothing could be more appropriate than entitling the volume of his collected papers "The Commonsense Psychiatry of Adolf Meyer." For him psychiatry was one broad field of organized common sense. And of all scientific disciplines none stands in more urgent need than psychiatry of being anchored in and permeated by that reputedly somewhat rare commodity. Among the leading psychiatrists of America Meyer was foremost in his constant promulgation of that doctrine, so completely embodied in his psychobiology.

During the 1890s he was one of the earliest to recognize the validity of the Kraepelinian synthesis, dementia præcox, and the consequent revision of diagnostic categories was strikingly evident in the statistics of the Worcester State Hospital following his appointment to the staff of that institution in 1895.

When the Thomas W. Salmon Memorial Lectureship was established at the New York Academy of Medicine it was inevitable and altogether fitting that Meyer should be chosen, as the one who had made the most conspicuous contemporary contribution to psychiatry, to give the initial Salmon Lectures.

First director of the Phipps Psychiatric Clinic, for more than a quarter of a century Meyer presided over that institution and made it an international training center for men and women in the field of psychological medicine. So generally was the need felt for his kind of teaching and for his continued leadership that the Johns Hopkins Hospital and Medical School retained him at his post for five years after the retiring age.

Adolf Meyer was an adherent of no school. Just as "schools" were outdated in general medicine, so for him was psychiatry a comprehensive discipline solidly based in medicine itself. It was no doubt a fortunate circumstance that his earlier years had been devoted to neurology and neuropathology. He insisted always on the study of the *individual* patient and the *whole* patient, each with his individual diagnosis. And to this end there must be a "decent examination" which took account of "organs" as well as "mental condition" and included all structural, physiological, constitutional, and experiential factors that contributed to the sum total of the clinical status.

Perhaps all this sounds commonplace today; and yet these fundamental principles which guided all Meyer's teaching and practice cannot be too often reiterated. Such combined teaching and practice was best calculated to promote understanding and appreciation of what psychiatry could offer to human health and welfare, and to facilitate the rapprochement of this discipline and the other departments of medicine. The stabilizing influence of the commonsense psychiatry of Adolf Meyer will no doubt be felt increasingly as the years go by.

MARYLAND'S OPPORTUNITY

After ten months without a head for the Maryland Department of Mental Hygiene, since the retirement of Dr. George A. Preston in June, 1949, the post has been filled by the appointment of Dr. Clifton T. Perkins, who for the past twelve years has

been head of the Massachusetts Department of Mental Health. Dr. Perkins took over his new office April first. In announcing the appointment at the beginning of March Governor Lane said: "We are fortunate in having been able, after a canvass of the roster of the leading psychiatrists and hospital administrators of this country, to secure the services of Dr. Perkins, who is professionally regarded as probably the most outstanding man in this field in the United States."

The new Commissioner, who is still on the sunny side of fifty, has had wide experience in mental health work as clinician, teacher, and administrator over a period of 22 years. In view of the important position he has so long held as head of one of the best organized state hospital systems in the country, it is safe to conclude that Dr. Perkins sees opportunity for a fine new undertaking in Maryland Free State in building up a mental hospital service that shall be second to none.

During the past year the State Department of Mental Hygiene has undergone reorganization, and the budget for the operation of hospitals was substantially increased. In addition, a $20,000,000 appropriation for new hospital construction was approved by the 1949 General Assembly.

One's thoughts turn back to the early years of this century when in Maryland, as in too many other jurisdictions as well, the care of patients in state institutions left much to be desired. At that time the vigorous campaign conducted by the newly appointed Commissioner, Arthur P. Herring, resulted in radical improvements throughout the mental hospital services. Between then and now the blight of war twice fell and the consequent economic and other adverse conditions again brought regression.

The time was ripe for a new advance, and in accepting the challenge of this opportunity Dr. Perkins will seek to apply and expand the procedures that gave Massachusetts preeminence in the mental health field. Emphasis will be placed on raising hospital standards to the level of approval by the American Medical Association and the American College of Surgeons. Cooperation and assistance of ranking psychiatrists outside the state service will be solicited for developing more effective training facilities not only for doctors specializing in psychiatry but also for the family physician, nurses, and other personnel. A desirable objective is the introduction of women nurses into all divisions of the mental hospitals, including the most disturbed men's wards. In order to disseminate psychiatric resources throughout the state the plan will include the eventual establishment of mental health clinics in rural areas and psychiatric wards or services in local hospitals. Moreover, each of the five mental hospitals would become a regional center for the promotion of mental health in its own prescribed area.

Dr. Perkins comes to Maryland with a wealth of experience and the knowledge of proved policies and methods. He left one big job effectively carried on to tackle another, and we foresee the success of his efforts.

ALFRED KORZYBSKI

"The transfer of meaning, in linguistic terminology, is semantics . . . . without semantics there is no true language." These words of Professor Mario Pei of Columbia University define the basis of the social, educational, and health work to which Count Alfred Korzybski had devoted the best years of his life. This basis in the science of meaning in linguistic form Korzybski greatly expanded into a general system of evaluation of human experience and behavior. This wider field of investigation he called General Semantics.

From the time when he founded the Institute of General Semantics in Chicago (1938) he was the undisputed leader in this field; and while numerous scientists and educators trained by him carried forward and disseminated his teachings, his position remained unique. In our time "Semantics," in its broadened sense, and Korzybski became virtually synonymous terms.

The death of this great teacher on March 1, a few hours after a coronary thrombosis, deepens appreciation of his essential contribution to human understanding, on an

individual, widely social, or international scale.

Korzybski was a mathematician and a philosopher, descended from a long line of philosophers and scientists. He was profoundly concerned with the problems of behavior and the perennial difficulties of communication between human beings, and he essayed to show ways by which these difficulties might be reduced. Mathematics he regarded as a form of human behavior or social activity having the soundest foundation for understanding and communication; and mathematical considerations occupy a substantial portion of his book, "Science and Sanity," the publication of which in 1933 created worldwide discussion. He supported his views, as mathematician Eric Bell remarked, by "a mass of evidence drawn from practically the entire range of science—including the biological sciences—such as has not been assembled in any one place before." And mathematician Cassius J. Keyser commented: "I feel bound to say that this work, taken as a whole, is beyond all comparison the most momentous single contribution that has ever been made to our knowledge and understanding of what is essential and distinctive in the nature of man." Said Smith Ely Jelliffe of this book: "It is a work of an inestimable and many-sided value, and one in which the neuropsychiatrist will find much to repay him for careful study."

It is worth noting that Douglas Kelley made use of general semantic methods, with favorable results, in training American troups in England preparatory to the Normandy landings. Korzybski's own work had been greatly influenced by his study of mental patients at Saint Elizabeths Hospital in Washington, D. C., in 1925-1926.

Korzybski trained many students from various disciplines, and the continuing work of these students will perpetuate and extend his teaching for the melioration, let us hope, of the relations between man and man and between peoples and peoples.

As we think of this good friend who has gone from us the further words of Mario Pei, whom we first quoted, seem appropriate in expressing Korzybski's work and objective: "Human progress is based upon cooperation; cooperation can be based only on understanding; understanding, in turn, is based upon the conventional acceptance of meaning. Semantics is therefore at the very heart and core not merely of language, but of human civilization."

NEWS AND NOTES

THE EBAUGH FOUNDATION.—During the past year students and friends of Dr. Franklin G. Ebaugh have contributed funds for the establishment of the Ebaugh Foundation in recognition of his services to the University of Colorado, to psychiatry, and to medicine. On the evening of February 15, 1950, a dinner was held to honor Dr. Ebaugh. At this time the funds of the Foundation were turned over to the Board of Regents of the University and a scroll expressing the appreciation of his colleagues was presented to Dr. Ebaugh. It is anticipated that the Ebaugh Foundation will support a research fellowship in psychiatry.

February 16, 1950, marked the 25th anniversary of the founding of the Colorado Psychopathic Hospital and of Dr. Ebaugh's tenure of office as its director. At the opening of the Hospital the professional staff consisted of 3 psychiatrists and 2 resident physicians. There are today 12 full-time psychiatrists and 35 psychiatric residents on the staff. The evolution of the psychiatric department of the University of Colorado Medical Center resulted in three divisions—the Psychopathic Hospital, the Mental Hygiene and Child Guidance Clinic, and the Psychosomatic Division. The latter is located in the Colorado General Hospital. These facilities have provided an excellent training program for both graduates and undergraduates in medicine and owe their establishment to Dr. Ebaugh's vision and initiative.

Dr. Ebaugh's tireless promotion of undergraduate teaching in psychiatry received nation-wide recognition and resulted in substantially elevating teaching standards in psychiatry almost everywhere. He served many years as chairman of the committee on psychiatry in medical education of the American Psychiatric Association; and in 1932 conducted a survey supported by the Commonwealth Fund, the findings of which were published in book form and constituted a valuable index both of the status of psychiatric teaching in the medical schools and of the changes and improvements that were indicated. This report contributed in pointing up the need for the formation of the American Board of Psychiatry and Neurology.

Those psychiatrists who have taken their training under Dr. Ebaugh are recognized for their continued interest in medical education. This is evidenced by the fact that of the 125 residents who have completed 3 years of training at the Colorado Psychopathic Hospital, more than three-fourths are closely associated with academic medicine.

MENTAL HEALTH INSTITUTES.—Grants under the National Mental Health Act totaling $27,250 have recently been awarded to help support the following institutes and seminars on mental health: Salt Lake City, June 12-22, for local health officers from 9 states; Kansas City, Kansas, June 20–July 1, for health officers from 8 states; Seattle, date not set, for health officers from 2 states and British Columbia; Massachusetts (cities not yet selected) between March and June, three 2-day institutes for nurses doing community and clinic work. Institutes under these grants have already been held at Atlanta, April 11-14, for mental health clinic personnel from 6 states; Frederick, Maryland, April 17-22, for public health nurses and health officers of Maryland; and Delaware City, Delaware, April 23-30, a human relations class workshop for selected school teachers from various states.

POSTGRADUATE COURSE IN PSYCHIATRY AND NEUROLOGY.—The University of California School of Medicine will offer at the Langley Porter Clinic, San Francisco, a 12-weeks course particularly designed to prepare psychiatrists and neurologists for taking the examinations of the American Board of Psychiatry and Neurology. The course will take place August 28 through November 17, full time, and will be directed by Dr. Karl M. Bowman, professor of psychiatry. Fee for the course is $200; this should be sent with application and biographical data (place of legal residence, medical school at-

tended and year of graduation, training and experience in psychiatry) to Dr. Stacy R. Mettier, Head of Postgraduate Instruction, Medical Extension, University of California Medical Center, San Francisco 22, Calif.

DOWNEY VA SEMINARS.—During the months of April, May, and June, 1950, the Veterans Administration Hospital at Downey, Ill., is conducting a series of seminars and demonstrations by a number of nationally prominent leaders in neuropsychiatry and related fields. Each speaker will conduct two seminars or demonstrations at the Hospital during the day and will deliver a lecture in the evening at the VA Regional Office in Chicago. The series takes place at weekly intervals on Wednesdays.

There is no charge for the series, and attendance of psychiatrists, physicians, and allied professional personnel will be welcome. Further information may be obtained from Dr. Byron S. Cane, Manager.

MICHAEL REESE SEMINAR ON RORSCHACH.—Michael Reese Hospital Postgraduate School will offer a Rorschach Test Seminar on "The Ego; Growth, Struggle, and Decline" to be conducted by Dr. S. J. Beck of the Hospital's psychology laboratory, from June 5 through June 9, 1950, full time. The course is open to qualified clinical psychiatrists and psychologists, and the tuition fee is $50. The seminar will lay primary accent on interpretation, although basic test technique will be demonstrated also.

For further information write to Dr. Samuel Soskin, Michael Reese Postgraduate School, 29th St. and Ellis Ave., Chicago 16, Ill.

SOCIAL SCIENCE RESEARCH AWARDS.—The Social Science Research Council has received from the Carnegie Corporation a grant of $465,000 to finance faculty research fellowships over a 5-year period. The program is designed to enable young social scientists with exceptional research ability to advance their research activities early in their teaching careers. Fellowships will be awarded each year to a total of 7 men and women, not over 35 years of age, chosen from the whole range of the social science faculties in American colleges and universities. Every candidate must have a doctoral degree or its equivalent in one of the social science fields, must be a regular faculty member of a college or university in the United States, and must be nominated or endorsed by the head of his department or dean.

Detailed information may be obtained from Elbridge Sibley, Executive Associate of the Council at its Washington office at 726 Jackson Place, N. W.

INSTITUTE ON LIVING IN THE LATER YEARS.—The Institute for Human Adjustment of the University of Michigan, in cooperation with the Extension Service of that university, will sponsor the third annual Institute on Living in the Later Years, to be held in Ann Arbor, Michigan, on June 28, 29, and 30, 1950.

The mental and physical health problems of an aging population will be dealt with, as well as educational programs for older people. The institute will include organized discussion groups and a demonstration of an activities center for older people.

Those interested in attending are invited to write to the University of Michigan Extension Service, 4524 Administration Bldg., Ann Arbor, Mich., for further information.

AMERICAN NEUROLOGICAL ASSOCIATION.—The 1950 annual meeting of the American Neurological Association will be held June 12-14 in Atlantic City, N. J., with headquarters at the Claridge Hotel. For further information write to the secretary-treasurer, Dr. H. Houston Merritt, Neurological Institute, 710 W. 168th St., New York 32, N. Y.

HIGH PROTEIN BREAD, NEW YORK STATE SERVICE.—Benefits of the highly nutritious bread developed by the State Department of Mental Hygiene for use in its own institutions have now been extended to more than 100,000 New York City school children. The bread, which supplies at low cost the daily requirements of certain essential food elements lacking in the average diet, is furnished to the children's school lunch program. It is also supplied to New York City hospitals and will eventually be served in all New York City institutions.

An account of the development of this loaf, along with its composition, appeared in the October 1948 issue of the JOURNAL.

PERSONALITY CHARACTERISTICS OF CRIMINALS.—Schuessler and Cressy (*Am. J. Sociol.*, March 1950) reviewing the literature of the last 25 years dealing with personality tests for differences between criminals and noncriminals found no evidence "that criminality and personality elements are associated," but that on the other hand "as often as not the evidence favored the view that personality traits are distributed in the criminal population in about the same way as in the general population."

PSYCHIATRIC NURSING PROJECT.—Under a continued grant-in-aid from the United States Public Health Service, the National League of Nursing Education in cooperation with the National Organization for Public Health Nursing is making a study to determine desirable qualifications for all mental hygiene and psychiatric nursing personnel. The League is attempting to locate all professional registered nurses in psychiatric institutions, public and private, psychiatric units in general hospitals, industry, mental hygiene clinics, schools of nursing, and advanced programs of study.

The first step in this study was to mail, through the directors of psychiatric and mental hygiene facilities in the United States and territories, a one-page questionnaire to all nurses (approximately 10,000) presently in the field of psychiatry in order to determine the qualifications of these nurses as to academic and clinical experience. It is hoped that a full report, based on the completed questionnaires, will be available by July 1.

Comments or suggestions concerning this study will be welcomed, and correspondence may be addressed to Aurelie J. Nowakowski, Staff Assistant, Psychiatric Nursing Project of the National League of Nursing Education, 1790 Broadway, New York 19, N. Y.

OCCUPATIONAL THERAPY, TRISTATE MEETING.—The third annual meeting of the tristate group of occupational therapists of Maryland, Virginia, and the District of Columbia was held March 11, 1950, at Williamsburg Lodge, Williamsburg, Va. Miss K. Kessler, president of the Virginia Occupational Therapy Association, presided.

More than 60 were present and heard a most interesting historical paper by Dr. G. Jones, superintendent of Eastern State Hospital, which supplemented his words of welcome. The State Commissioner of Mental Hygiene, Dr. Joseph Barrett, followed with an account of his pioneer work in establishing mental hygiene clinics and of their present development. Dr. B. Nagler read a paper, illustrated by lantern slides, on Art for the Mentally Ill. The meeting closed with presentation of three movies: Time Out, The Road Back, and To Hear Again.

BOOK REVIEWS

CHILD PSYCHIATRY. Second Edition. By *Leo Kanner, M.D.* (Springfield, Ill.: Charles C. Thomas, 1948.)

The first edition of this classic textbook was published in 1935 and was reprinted 4 times. So much new knowledge has been acquired since 1935 in such subjects as dynamic anthropology, psychosomatic medicine, psychology, and the effects of the second world war that the author has wisely seen fit to rewrite practically the whole text.

The book is divided into 4 parts; Part I, History of Child Psychiatry; Part II, Basic Orientation, covering such factors as physical condition, intelligence, emotion, personality, etc.; Part III, Clinical Considerations; Part IV, Phenomenology. This is divided into 3 sections: personality problems arising from physical illness, psychosomatic problems, and problems of behavior.

The author covers his field in a systematic manner, bringing together a great number of subjects in a remarkably well-integrated textbook including every imaginable disease, abnormality, and condition that affects the mental life and development of the child. He has spared no energy to present all the available knowledge from all authoritative sources to every subject pertaining to this wide field (he mentions about 900 authors). For instance, every one knows of Pavlow's conditioned reflex experiments on dogs but few are aware that about the same time, 1907, H. Bogen, of the Heidelberg Children's Clinic, reported in Pflueger's *Archives for Physiology*, succeeded in demonstrating the conditioned reflex flow of gastric juice by sounding a toy trumpet—not in dogs but in a 3½-year-old boy with an esophogeal stenosis due to accidental ingestion of caustic solution. Again, Kanner alludes to the fact that D. Hack Tuke in 1872 cured cases of asthma, constipation, etc., with "psycho-therapeutics," thus antedating by some 50 years present-day "psychosomatic" medicine.

On the subject of classification the author finds the same difficulty as previous authors. He mentions the psychobiological theories of Meyer among others but he has not built this book on them as he did the first edition; he is much more eclectic. He gives credit to Freud for "overcoming courageously the prejudices of his time" and "freeing science from the restrictions it had put on itself under the pressure of cultural censorship. His far reaching discoveries made it clear once and for all that sex does not come to children suddenly at puberty, but as all other human functions undergoes an evolution from the beginning of life."

The present diagnostic groupings he finds very unsatisfactory. One readily agrees; but the complicated formulations which he suggests, e.g., "restlessness and aggressiveness in an unwanted preschool child driven incessantly by perfectionistic parents," etc., are too involved for a workable scientific classification; and after all there must be order for scientific progress.

The chapter on attitudes is excellent—the effects of the various environmental attitudes, those of the parents, teachers, playmates, even the doctor ("iatrogenic states") are thoroughly discussed. Other chapters, such as those on the digestive system, sexual behavior, speech problems, delinquency, etc., are beautifully handled.

His remarks on therapy throughout the book are very practical and free from "isms"; suggestions for treatment are based on case histories from an exceptionally rich clinical material. The general practitioner, pediatrist, and others will find here valuable information about the way to handle conduct disorders.

Sometimes a further discussion of the mental mechanisms underlying conduct disorders might be desired, *e.g.*, on page 396 he does not mention the child's unconscious wish for his mother's death (the symptom was "fear of mother's death"). In other cases such as the constipation problem of 10-year-old Bernice (p. 400) he demonstrates in a graphic manner the deeper emotional conflicts underlying the child's behavior and how dramatically the symptom was eliminated when the child's ego was built up.

In the treatment of the parent the author recommends in a footnote (p. 245) that a social worker deal with the parent while the doctor treats the child. "Thus neither the child nor the parent is treated as an appendage to the other." The reviewer feels that this is so important that it should be given more than footnote attention; it should be stressed as almost a *sine qua non* in the treatment of many children with conflictual behavior disorders and personality problems. The parents should be instructed at separate interviews not known to the child about their role in the treatment, about the delicate relationship between doctor and patient and how easily distrust can creep into a sensitive child's mind in relation to the doctor and his parents. However, the author warns the physician in private practice "where a social worker is not available for managing the parents, to avoid certain pitfalls, viz.: (1) jealousies between parent and child; (2) the family may use the physician as a referee. . . .; (3) the request that the physician come to the patient's home as a friend invited for dinner to observe the child. . . .;" and (4) giving "exclusive attention to the child." He emphasizes wisely that the parents' participation in the treatment is a must.

He mentions the ideal treatment set-up—the clinical team consisting of the psychiatrist, psychologist, and social worker. The various types of therapy such as play therapy, release therapy, finger painting, drawing, and other projective methods are recognized.

As to major psychoses the author devotes a

chapter to schizophrenia that is adequate. He does not feature manic-depressive psychosis since it is rare in childhood and occurs only in its later years. He devotes a chapter to suicide. He states that only a small minority of suicides in children are due to schizophrenic and depressive psychoses. Rather these children feel that life is unbearable. He quotes from the suicide studies of Schilder and Bender that there is hardly a case in which the motive of spite does not play an important part.

It is difficult to write such a book covering so wide a field and do it so thoroughly without losing the interest of the reader. The author has a keen sense of humor which he finds difficult to suppress! His figures of speech also enliven his style, and his excellent case presentations are stimulating and have a leavening effect in the handling of so serious and heavy a subject. This edition like the first one will doubtless have a wide demand.

O. J. RAEDER, M. D.,
Boston, Mass.

BETTER CARE IN MENTAL HOSPITALS. Proceedings of the First Mental Hospital Institute of the American Psychiatric Association, April 11-15, 1949. (New York: The American Psychiatric Association, 1949.)

The First Mental Hospital Institute of The American Psychiatric Association was held in Philadelphia in April, 1949. Almost 200 participants from 36 states, 6 Canadian provinces, Puerto Rico, and New Zealand cooperated in a program designed to improve the status of psychiatric hospitals and the quality of their service. The Proceedings of the Institute have now been published and should be studied carefully by everyone at work in the mental hospital field. The picture they afford of practices, problems, and needs of the mental hospital of today is vivid and realistic.

Although certain alterations were made by the editor and his advisors in the interest of clarity and continuity, the text of the Proceedings is essentially verbatim. The informal atmosphere of the meetings is thereby preserved, the lively exchange of thought and experience effectively maintained. The book is readable as well as informative.

Contents fall into 4 main sections: administration, community relations, personnel, and clinical relations. In the first, questions of control, of budgets, of construction, of ward management, of release and subsequent supervision are dealt with. In section two, public relations are considered from the following major points of view: getting the community to help the hospital; relations between the hospital and the medical profession; what legislators expect from mental hospitals; and the use of state-wide clinics to improve hospital relations. The third section considers standards for mental hospital staff and personnel, salaries, training, recruiting, and personnel administration. The fourth section on clinical relations covers a variety of problems ranging from admission procedures, diagnosis and treatment, to care of the aged and, finally, follow-up of discharged patients. The Proceedings close with an abstract of a talk on public relations, by Dr. Clifton T. Perkins, conveying the following important message: "We who know must tell the story. The man who knows must tell."

There is a wealth of important information in this report, and of food for thought, an infinite supply. This is reference material of great practical value to the administrative, medical, and assisting staffs of all psychiatric hospitals.

C. C. B.

PSYCHOSEXUAL DEVELOPMENT IN HEALTH AND DISEASE. By *Paul H. Hoch, M. D.*, and *Joseph Zubin, Ph. D.* Editors. (New York: Grune and Stratton, 1949.)

This volume is an edited edition of the proceedings of the 38th annual meeting of the American Psychopathological Association, held in New York City, June, 1948. As the editors point out they had no desire to cover all aspects of sexuality and have limited the discussions to certain specific topics. The papers selected, however, are certainly representative of a wide cross-sectional approach to the problem, and the entire volume represents a real contribution to this always popular and recently re-emphasized area of psychiatric thought. The papers are divided into 5 sections beginning with a general orientation, then an anthropological approach, then a clinical and psychoanalytical approach, a discussion of therapeutic attitudes, and a sociological approach. Each section contains several papers except for the single therapeutic address and, in addition, excellent discussions.

The introductory group includes, as one would expect, a launching discussion on concepts of normality and abnormality in sexual behavior by Kinsey and his co-workers. It is good to see the co-workers emphasized since they really represent a group of men forgotten by the public. This chapter is roughly a summary of Kinsey's previously published material and presents his basic notions. Gantt next presents a fascinating chapter on psychosexuality in animals, which like Doctor Kinsey's studies unfortunately is limited to males. Like Kinsey he found in his acknowledged limited and experimental study that sexuality in animals has curious manifestations even as in the human. This is further backed up by the third paper, a cross-species survey of mammalian behavior that is extremely interesting and refutes oft-heard theories defining perversion as anything that animals don't do. From these studies it seems clear that there are practically no so-called perversions of exclusively human type. Such studies should be more widely publicized in an attempt to overcome the remarkable lack of education in our civilization on these points. As the authors point out, "The foregoing data are highly relevant to any interpretation of human sexual life. Any theory which regards intraspecific, heterosexual coitus as the only 'biologically normal' form of sexual expression would seem to demand some revision. The comparative approach to human sexuality gives us ground for suspecting that erotic responsiveness must be gradually conditioned to a particular type of sexual

object." A paper on human behavior in cross-cultural perspective winds up this group and introduces the anthropological approach.

This section includes studies of child sexuality in Pilaga culture, psychosexual adjustment in a non-literate (Saulteaux) group, and a discussion on psychologic weaning. These contributions summing up other cultural notions are extremely valuable.

The clinical approach takes up problems of childhood sexuality and also presents an adaptational review of sexual behavior that is exceedingly intriguing. Some aspects of sexuality in psychoanalytical experience are also given. In this section we begin to find some argumentative discussion, particularly with the first group of contributors directed at supporting psychoanalytical theory. It is difficult to agree with one contributor, Bychowski, however, that "It becomes apparent that the sexual behavior of the human being is largely determined by his relationship to other individuals." He emphasizes this as the basic difference between human and subhuman sexuality. A rereading of the first part makes one feel that this author has missed his point completely. Levy's discussion further stresses the argument between Kinsey's findings and psychoanalytical theory. Here is an extremely valuable discussion and should certainly be required reading by all psychiatric workers, as it clearly presents the threat of Kinsey's work to psychoanalysts and points out a rational attitude for recognition of those findings today. Hoch further emphasizes this point and these discussions alone are well worth the price of the book.

Knight next presents a brief paper on therapy and then the last section launches into the sociological approach to the problem.

Taken as a whole, this volume represents one of the soundest presentations of some of the difficult problems of sex published in recent times. The papers are clearly written, sufficiently controversial to be interesting and yet adequately scientific to be authoritative. Sex is certainly not solved to date but volumes such as this are stepping-stones on the road to eventual better understanding of its omniform ramifications.

Douglas M. Kelley, M. D.,
University of California,
Berkeley.

The Case of Rudolf Hess. Edited by *J. R. Rees, M.D.* (New York City: W. W. Norton & Company, Inc., 1948.)

This small book is not just another individual case study written for psychiatrists. It is a scientific and detailed revelation of the personality of the man who came very close to being the "veep" of the world. It is a very important record for history. It shows how a sick personality can reach a place of importance and influence along with another sick person (Hitler) and create a disturbing and chaotic period in the history of the world.

Throughout the book the fine and steady hand of the editor, Brigadier Rees, can be felt and even read in and between the lines. Certainly no one else was so well qualified by contact with the patient and by sound information and point of view about the whole situation to be the editor of this document.

In the Hess case, psychiatry was certainly "on the spot" in the eyes of the public. If the board of psychiatrists had had to come out with a flat report of "insanity," it would have been put down temporarily at least as another publicly interpreted instance of where psychiatrists saved criminals from punishment. Fortunately, there were complicating and mitigating factors, and Hess took full advantage of them. It is difficult for the public, and even some medical men, to understand that this psychopathic personality with a chronic neurosis could also have schizophrenic episodes and hysterical amnesias and yet make use of his symptomatology in a malingering manner. To so many people, he had to be either a schizophrenic or a hysteric or a malingerer—not any combination of these. Psychiatry has advanced from the single, pigeonhole diagnosis stage to a more complete description of the personality and the factors back of the symptoms.

The way in which the case was handled in court should be a precedent for future procedure in such legal matters. The board of psychiatrists made a written report to the tribunal after agreeing among themselves on what should be stated. There was no cross examination on the stand in an attempt to tear apart the evidence or discredit the individual psychiatrist.

The writer of this review was closely associated with Brigadier Rees during the war and, therefore, had considerable first-hand information about Hess. Surely Hess was not malingering his paranoid schizophrenic condition in England and certainly he was a psychopathic personality.

This book, as well as the account about other high German officials given in the book by Dr. Douglas M. Kelley entitled "22 Cells in Nuremburg," should be read by all psychiatrists and by all others who have an interest in understanding how personalities shape and influence the course of world events.

Lloyd J. Thompson, M. D.,
Bowman Gray School of Medicine,
Winston-Salem, N. C.

An Outline of Psychoanalysis. By *Sigmund Freud.* Authorized translation by *James Strachey.* (New York: W. W. Norton & Co., Inc., 1949.)

This brief recapitulation of Freudian doctrines was written in 1938. It was never completed, but, in the opinion of the present translator, it was near completion. It was published in German in 1940 with title, "Abriss der Psycho-analyse," and appeared in English in the *International Journal of Psychoanalysis* during the same year. The present edition is a reprint with revisions.

It may be regarded as the author's final testament and as a definitive statement of his teachings. Its purpose, he writes in his introductory note, "is to bring together the doctrines of psychoanalysis and to state them, as it were, dogmatically—in the most

concise form and in the most positive terms." (J. Robert Oppenheimer states: "There is no place for dogma in science.") Freud takes account of possible scepticism, for he adds that the intention of the book "is naturally not to compel belief or to establish conviction." However, he rules out criticism of his system by the uninitiated with the assertion that "no one who has not repeated those observations upon himself or upon others is in a position to arrive at an independent judgment of it."

The tenets of Freud are by this time pretty well known, even to the generality. But it is convenient and desirable to have in this condensed version (124 pages) the final statement of his doctrine in the form in which he wished it transmitted to posterity.

C. B. F.

CRIME AND THE MIND. By *Walter Bromberg, M. D.* (Philadelphia: J. B. Lippincott Company, 1948.)

A psychoanalytic formulation of crime is presented in this intriguing book. The author is an erudite student of criminology with a vast personal experience in the field and the book reflects such on every page. Even the reader who may take exception to many or even all of the author's interpretations and opinions will profit immensely from studying them. This author has taken a definite stand and in a forthright manner has laid all his cards face up on the table. He believes that the individual criminal may best be understood in the light of psychoanalytic concepts. Many psychiatrists will undoubtedly agree with him on the basis of a conviction that psychoanalysis is *the* science of human nature and its method the most effective for understanding all nature. There have been numerous studies of criminals, but no such comprehensive appraisal of their psychology in psychoanalytic terms. It is possible and even probable that many psychoanalysts will take issue with some of the author's statements, but that is immaterial. If this book succeeds in stimulating thought, controversy, and discussion, and I am sure it will, a substantial contribution will have been made to the attack on the problem of crime.

The first part of the book presents a panorama of legal and social attitudes toward crime and the criminal in historical perspective. This is an admirable accomplishment in itself, for it excels in penetration and scope, and reveals the author's practical experience with law in action. He writes, ". . . . still the Law, while anachronistic in precept, is less so in practice, particularly where it depends upon the liberality of judges, the type of offense and the enlightenment of the community."

Part Two deals with the individual criminal and is divided into 4 sections. The first is entitled, *The Psychopathic Personality.* More than a quarter of the entire book is devoted to this subject. He points out that there is a "group of individuals whose anti-social impulses did not appear to influence their intellectual capacity. . . ." "In the first part of the nineteenth century the designation 'morally insane' was considered an adequate description of the group. Individuals in this group are now classified as psychopathic personalities or morbid personalities. Although their acts betray a pattern within the personality which is distinctly abnormal, they do not demonstrate the signs or symptoms of insane individuals." He might have added that they do not demonstrate the signs or symptoms of neurotic individuals, although in his extended comments he notes that there may be admixtures of all these categories. The author draws on his experience to present numerous case histories that exemplify various types of psychopathic personality, some classified as paranoid, others as schizoid, aggressive, etc. These morbid personalities embody some of the major problems facing psychiatry today. The author's case studies are too brief to indicate the emergence of any particular principles or fundamentals concerning psychopathic personality; numerous case studies by other authors have been more detailed and instructive. They are principally of value in highlighting one category of psychiatric problems in criminology.

A chapter on *Emotional Immaturity in Crime* expands on the relationship between criminal behavior and emotional immaturity. It requires courage to essay a definition of emotional maturity. The author has the courage to make the attempt, and the competence to succeed in offering an acceptable formulation.

In the chapter entitled *The Neurotic Offender* the author ventures the opinion that this category includes the majority of individual offenders. He writes: "The neurotic offender, in contrast to the psychopath, becomes a criminal in response to a solitary aberrant impulse. The criminal act embodies a symbolic and indirect gratification of a completely unconscious impulse which is not part of the pattern of daily behavior. . . . But such offenders are not neurotic in the ordinary clinical sense. In such persons the unconscious conflict finds expression in a forbidden act rather than in a neurotic symptom. Psychological conflicts, causing behavior at sharp variance with the individual's accustomed social performance, are only exposed through study of the content of the criminal act." This is a unique and plausible theory of the performance of incongruous acts by essentially conventional individuals, and by similar token may be applied to instances of psychotic criminality. Indeed, the author might well have included a special section on the psychotic offender.

The final chapter is entitled *The Cure for Crime.* The use of the definite article suggests that the author has the answer. But the eager reader is doomed to disappointment. The essence of the author's recommendations is embodied in a profession of psychoanalytic piety. He expresses the hope that through psychoanalysis we may ultimately learn enough about individual criminals to prevent somehow their misbehavior by briefer and more practical techniques. But not quite all his eggs are in the psychoanalytic basket. He recognizes the significance of those extrapersonal social factors that are conducive to criminality, and he indicates that an attack must be made on these as well. In this chapter the author is at his best when he is off

guard, so to speak, and is presenting his opinions in simple, nontechnical language. This is interspersed, however, with rather sweeping psychoanalytic generalizations. The latter may or may not be correct; it depends entirely on the validity and efficacy of present-day psychoanalysis. However, it is certainly advisable to proceed as soon as possible with any method that may effect a result.

If there is any weakness in this book it appears to lie in the author's rather naive acceptance of the current formulations of psychoanalysis. One need only look backward to what they were yesterday to anticipate what they may be tomorrow. Yet no one who makes any pretense of scientific honesty and open-mindedness and who has, therefore, followed the evolution of psychoanalysis from Freud to the present date can categorically dismiss the entire movement. Despite conflict and quibbling concerning many of its theories, there is little doubt that the basic and original contributions come nearer to a correct understanding of human nature than any previously formulated system of psychology.

All in all, this is an outstanding contribution to criminology. One may take issue with details, but not with the book as a whole. The weaknesses in this book are inconsequential compared with its strengths. Aside from the quality of its content, it is very well written. The author has an easy, attractive style that enhances the pleasure and interest of the reader. This book should be possessed and read and reread by anyone and everyone with an interest not only in crime but in human behavior as such.

HARRY L. KOZOL, M. D.,
Boston, Mass.

PSYCHIATRY IN NURSING. By *R. Headlee* and *B. W. Corey*. (New York: Rinehart & Company, 1948.)

This book sets out to be a text for student nurses of a general hospital who are affiliating with a mental hospital for a brief period of training. It is in 3 parts dealing with human behaviour, mental illnesses, and psychiatric nursing.

The discussion of normal behaviour includes an outline of psychoanalytic theory, a note on the work of Kretschmer and Sheldon on the relation of bodily and temperamental types, and two short paragraphs on the work of Adolf Meyer and the psychosomatic school. The main mechanisms of thought are explained, but very shortly. Then follow two chapters on sleep and pain respectively. It is difficult from this part to gain any clear view of normal behaviour, and the elaborations, although interesting, do not have any obvious connections with the main theme.

In the second part, the varieties of mental illness, half the space is given up to neurological conditions and others which may cause some mental disorders, but are described from the physical point of view mainly. The psychoses are dealt with shortly but in a traditional manner. The section on the neuroses is interestingly written, but a new classification and terminology makes it more difficult at first to understand. Everyone knows that diagnosis in the neurosis group is comparatively unimportant, and to substitute new for old and familiar terms is merely confusing, without adding anything to the knowledge of the condition.

The nursing chapters are good but very slight. They deal with mental hospital procedures and special precautions, observation of patients and special procedures, but the latter chapter deals with such items as taking temperatures, tube feeding, baths and packs, not the more complicated treatments such as insulin shock.

On the whole the book covers the traditional ground of psychiatry, but it varies very much in quality. It has some sections very well done, but not all.

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RECREATION IS FUN. By *Esther M. Hawley*. (New York: The American Theatre Wing Inc., 1949).

In "Recreation Is Fun," Miss Hawley presents an excellent analysis of entertainment for the benefit of patients in hospital. This analysis is the result of much experimentation in all sorts of hospitals, by a great many specialists in all branches of the entertainment field.

The first part of the book is comprised of an introduction to the major disability groups, and provides sound guidance as to their limitations and requirements in the various hospital settings. The second part presents outlines of suitable programs and procedures. These outlines have been selected from proved material, and applied according to the particular disability group. The basic principles embodied in the text may be selected to apply adequately to any particular set of circumstances.

While this book was originally intended as a handbook for the guidance of volunteer workers, it would be of great assistance to anyone conducting entertainments for hospitalized patients. "Recreation Is Fun" is a stimulating and valuable book that invites further research and encourages initiative in providing entertainment for the benefit of patients.

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WHICH WAY OUT: STORIES BASED ON THE EXPERIENCE OF A PSYCHIATRIST. By *C. P. Oberndorf, M. D.* (New York: International Universities Press, Inc., 1948.)

Which Way Out is a pleasing and instructive book which should appeal to a wide circle of readers. It is built around the career of a psychiatrist, the fictionalized Dr. Ford, and the challenges, successes and failures which were his through long years of professional practice. One of the most interesting features of the book is, in fact, this portrayal of the psychiatrist, and of the

influences which shaped his destiny, his methods and his orientation to psychiatric problems. The temporal sequence in the book is such as to highlight advances made in the field of psychiatric practice during the twentieth century.

Different experiences of Dr. Ford—in hospitals, in travel, in social contacts, and in clinical practice—are used as the framework for illustrating many common forms of human maladjustment. The background for suicidal ideas, feelings of rejection, father fixation, homosexuality, hysterical manifestations, and other familiar psychopathological symptoms is vividly described. Each story is a composite case history, exemplifying a problem of disturbed living and the therapeutic approach employed by the understanding physician.

The long experience of Dr. Oberndorf in clinical psychiatry and his great narrative skill are happily combined in this book. These are stories of deep human interest.

C. C. B.

ANATOMICAL WALL CHART, No. 27. (New York: Rudolf Schick, 1949.)

An anatomical wall chart of the central nervous system has been nicely prepared by Rudolf Schick Company of New York. It represents in a clear and graphic fashion the topical areas of the brain and to a lesser extent the main spinal nerve trunks. As a diagrammatic presentation for the purpose of illustrating the superficial structures of the brain and cord, it is useful. From this aspect it could be used to advantage for teaching purposes, where this type of superficial anatomical demonstration applies. Here, the various colours used to depict the special topical localizations, combined with a useful index at the bottom of the chart, would be of further value from the point of view of demonstration.

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THE BELLA COOLA INDIANS. By *T. F. McIlwraith.* (Toronto: University of Toronto Press, 1948.)

"The Bella Coola Indians" is the report of the life and lore of a group of some 300 surviving Salish-speaking Indians living on the west coast of British Columbia. The field work was completed in 1922-24 in the descriptive tradition of the English anthropological school of Rivers and Seligman. The two volumes cover in text and appendices aspects of Bella Coola culture ranging from social organization and rank through life cycle, daily and seasonal activities, to religious beliefs, relations with the supernatural, and medicine, magic, and taboo.

The author has knowingly and consistently refrained from structuring the data within any theoretical framework; his stated purpose being to record in detail, and as objectively as possible, the total aspects of Bella Coola life and belief. Consequently the volumes provide the student of comparative cultures with a wealth of detailed information that may be used as the document of a single (and vanishing) culture, or as a source book for detailed descriptions of separate aspects.

While certain elements of the ethnographic data may be of little interest to psychiatrists and psychologists, several areas are of importance for their psychological implications. Among these, the chapters on rank and features associated with the potlatch, describing a value system in which status and individual sense of security are achieved through the validation of personal events by gift-giving, are of significance. Chapters dealing with religion and relations with the supernatural illustrate forcibly the effects of belief on daily life and the paradoxical situation in which a group of individuals fear and respect their supernatural beings, yet frequently make fun of them and outwit them.

An interesting addition to the psychology of sex is found in Professor McIlwraith's treatment of the Bella Coola belief that intercourse following certain prescribed periods of continence lends power to the individual and assurance of success in his ventures. Without evoking any theory of personality development, the author's recording of life cycle, mythology, effect of beliefs, and attitudes toward birth and death provides excellent data against which personality theory can be cross-culturally validated.

In general, these 2 volumes can be read to advantage, in part at least, by workers in any field interested in human development and functioning; both as a check on hypotheses and as a source for illustrative materials.

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MODERN TRENDS IN PSYCHOLOGICAL MEDICINE—1948: Edited by *Noel G. Harris.* (New York: Paul B. Hoeber, Inc., 1948.)

This book represents a forthright attempt by a number of outstanding contributors to evaluate broadly the current data of psychological medicine and to estimate some of the future prospects and needs. Considering the highly controversial nature of the field, even in many of its fundamentals, and the very limited areas of general agreement, it is perhaps surprising that so effective a coverage could be published at this time, particularly in the limited space of 450 pages. In the attempt to produce a "visionary layout" the subject material has been assigned to authors of various special training or interests. The chapters range from "The Physiology of Emotions," by S. Wright, to "Psychological Medicine and World Affairs," by J. H. Masserman. In general, the best chapters are the more specialized ones, where documentation is supplied and there is less temptation to fall back on personalized philosophical rumination. Most of the authors have attempted to stay close to the evidence and have avoided the crystal ball. References have been liberally supplied, with effort to synthesize their content. Personal bias appears in many of the articles, but in a form more often

stimulating than objectionable. Of the 19 chapters, 16 were written by authors from the British Isles, 1 by a New Zealander, and 2 by Americans. The result is a volume of particular value to those whose acquaintance with psychiatry is more restricted to the American scene. While there is considerable variance in literary style, most of the articles achieve a wholesome combination of readability and precision, so characteristic of many British texts.

The topics covered are all pertinent to the theme of the book, and all are of interest to psychiatry. These are some of the chapter headings: "The Importance of Constitutional Factors"; "The Causative Factors in Mental Disturbances"; "Electrophysiology in Psychiatry"; "Marriage and Family Life"; "Psychopathic Personality"; "Psychotherapy"; "Recent Technique of Physical Treatment and its Results"; "Modern Social and Group Therapy"; "Character Formation in Relation to Education"; "Personnel Selection"; "Mental Hygiene in Industry"; "Rehabilitation and the Individual."

It is difficult to imagine the ideal reader audience for such a book as this. Some of the chapters would make interesting reading for the novice in the field of psychological medicine, and would be of limited interest to the well-trained psychiatrist. Most of the chapters are far too specialized for the tastes of laymen or newcomers to psychiatry. The psychiatrist-reader will find much familiar material summarized in an interesting way, as well as considerable material not so familiar. Such a reader is likely to gain a few new facts and ideas of applied value, together with a broader familiarity with the more basic material of psychological medicine. While the effort of many of the authors to peek into the future is intriguing and lends some additional color to the volume, those efforts are so speculative as to be of very limited value.

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SYNOPSIS OF PSYCHOSOMATIC DIAGNOSIS AND TREATMENT. By *Flanders Dunbar, M. D.* (St. Louis: C. V. Mosby, Company, 1948.)

In this recent addition to the well-known Mosby series of synopses of the various medical specialties Dr. Dunbar attempts to outline the present status of psychological investigation into general medical and surgical conditions. Her aim is to follow Osler's outline adding what various psychiatric investigators have shown relative to practically every common disease syndrome seen in general medical or surgical practice.

The material is brief and often in outline form. There are many direct quotations from various sources. The author is fair in including many and often diverse opinions, realizing that psychosomatics is a field still in flux.

The headings make it possible to find and read quickly what has been done relative to a given disease entity. Furthermore the author restrains the use of highly technical psychiatric terminology and discusses psychotherapeutic mechanisms in broad general terms as if aiming the book at the practical medical clinician.

Dr. Dunbar and the Mosby Company are to be congratulated on this needed addition to the company's popular series of medical synopses.

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BASIC PRINCIPLES OF PSYCHOANALYSIS. By *A. A. Brill, M. D.* (Garden City, N. Y.: Doubleday, 1949.)

At the time of Dr. Brill's death on March 2, 1948, he was engaged in the revision of this book written over 25 years ago. During the interval it had enjoyed a wide and continued popularity and exercised great influence in acquainting both physicians and the lay public with Freud's theories. The revision of the book was completed by his friend, Dr. Phillip R. Lehrman, who adds a prefatory note.

The 13 chapters cover very adequately the cathartic method with which psychoanalysis began, the nature and function of pathological symptom formation, and especially the analysis of dreams, the psychopathology of wit, forgetting, artistic productions, choice of vocation, etc. The book is written in Brill's characteristically engaging style, enlivened by numerous anecdotes and amplified by cogent case histories illustrating his points.

Although the work has been revised it does not present in detail some of the later trends in psychoanalytic thinking, such as the categories of the mind and the nature of anxiety. However, Brill has covered these aspects thoroughly in his more recent books—*Freud's Contribution to Psychiatry* (1944) and *Lectures on Psychoanalytic Psychiatry* (1946). In the work on "Freud's Contribution," Brill recounts that when in 1922 he spoke with Freud after reading *The Ego and the Id*, which had just appeared, and had expressed his great admiration of it, Freud replied, "I am glad that you like it but one can be a first class analyst without reading it."

Certainly the basic principles of psychoanalysis had been established by that time, and it is a great tribute to Brill's skill as a writer that his book after 25 years retains all of its vitality and appeal and gives the layman in a clear and interesting manner the development, the theory, and especially the psychiatric and clinical aspects of psychoanalysis.

C. P. O.

MIND: PERCEPTION AND THOUGHT IN THEIR CONSTRUCTIVE ASPECTS. By *Paul Schilder.* (New York: Columbia University Press, 1949.)

GOALS AND DESIRES OF MAN: A PSYCHOLOGICAL SURVEY OF LIFE. By *Paul Schilder.* (New York: Columbia University Press, 1949.)

These two volumes are reprints without change of the original works that appeared in 1942 and were reviewed in this JOURNAL in the July 1943 and the January 1943 issues, respectively.